

**The role of social media as an information source in the decision making
of students when selecting a university**

by

Letitia Engela Fourie

submitted in accordance with the requirements
for the degree of

Master of Commerce

in the subject

Business Management

at the

University of South Africa

Supervisor: Prof MC CANT

May 2015

Student number: **44940556**

DECLARATION

I declare that *“The role of social media as an information source in the decision making of students when selecting a university”* is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

May 2015

SIGNATURE

(Mrs LE Fourie)

DATE

DEDICATION

To the strongest woman I know, my mom Hester van den Berg, you have overcome so much in your life and in turn you have given so much more. Thank you for your unconditional love, time and support through all the years. You have made an immense difference in my life and I could not have come this far without you. You inspire me to be a better person each and every day.

ACKNOWLEDGEMENTS

Firstly, all the praise and glory to God for without Him nothing is possible. I would like to thank a few extraordinary people for their support during this journey.

Prof Cant, my supervisor, thank you for all your patience, advice, time and guidance during the process of completing my dissertation. Thank you for motivating me, especially when I started to slow down. I could not have asked for a better supervisor and mentor.

The University of South Africa for the bursary that made it possible for me to complete my studies.

Nathi Zongozzi, thank you for your expertise and help with my online survey.

Glenda Buncombe for editing my dissertation.

Each and every student that took the time to complete my survey.

Thank you to my friends and colleagues – especially Adri for your advice, support and motivation during the whole process. Also, Ricardo and Cindy for your time and guidance when I needed it the most, I really appreciate it.

To my parents Corrie and Hester, thank you for all your love and support. Without you I would not have come this far. Thank you for always believing in me. Also my sister Franlie, thank you for your love, support and your willingness to help where you can.

Most importantly, my fantastic husband Euan, without you this dissertation would not have been possible. Thank you for your unconditional love and support and for always believing in me, even when I did not believe in myself. You were there to motivate me every time I wanted to give up. I am so blessed to have you in my life.

ABSTRACT

Social media is an important part of the everyday lives of young and old alike. Consumers today turn to online sources more and more to help them make decisions. They ask for advice online on purchases they want to make and read extensive reviews that help them to make a purchase decision.

With a broad literature review conducted, it was noted that in the past traditional media was mainly used by students as information sources in their decision-making process. The purpose of this study was to determine what role social media as an information source has in the decision making of students when selecting a university. Data was collected from University of South Africa students by means of an online questionnaire. The sample was selected using probability sampling in the form of simple random sampling.

The results of this study indicated that students use social media as an information source to some extent when making a decision about a university. Social media was found to be a credible source of information albeit it only has a slight influence on their decision-making process. Students are present online and use social media mostly on their cell phones for entertainment purposes. Universities should take note of the role that social media plays in the lives of students. It can enable them to better market their institutions to potential students.

Key terms

Social media, social media marketing, consumer behaviour, decision making, information sources, marketing, higher education, universities, South Africa,

CONTENTS

CHAPTER 1.....	1
1.1 BACKGROUND.....	1
1.2 PROBLEM STATEMENT AND RESEARCH OBJECTIVES.....	2
1.3 LITERATURE REVIEW.....	3
1.3.1 SOUTH AFRICAN HIGHER EDUCATION ENVIRONMENT.....	3
1.3.2 SOCIAL MEDIA.....	4
1.3.2.1 Two-way communication.....	6
1.3.2.2 Social media as a marketing channel.....	7
1.3.3 DECISION MAKING.....	8
1.3.3.1 Decision-making process.....	8
1.3.3.2 Highly complex decision-making model.....	9
1.4 RESEARCH DESIGN AND METHODS.....	11
1.5 CHAPTER OUTLINE.....	12
CHAPTER 2.....	14
2.1 INTRODUCTION.....	14
2.2 HISTORY OF THE HIGHER EDUCATION LANDSCAPE IN SOUTH AFRICA.....	15
2.3 SOUTH AFRICAN PUBLIC UNIVERSITIES.....	16
2.4 SERVICE MARKETING AND HIGHER EDUCATION INSTITUTIONS.....	18
2.5 MARKETING COMMUNICATION OF HIGHER EDUCATION INSTITUTIONS.....	21
2.5.1 INTEGRATED MARKETING COMMUNICATION.....	22
2.5.2 CHANGES AFFECTING THE MARKETING OF HIGHER EDUCATION INSTITUTIONS.....	25
2.5.3 HIGHER EDUCATION INSTITUTIONS: CURRENT AND DIGITAL MEDIA MARKETING.....	27
2.6 CONCLUSION.....	28

CHAPTER 3.....	30
3.1 INTRODUCTION	30
3.2 WEB 2.0: BRINGING NEW POSSIBILITIES TO THE INTERNET	30
3.2.1 USER-GENERATED CONTENT	31
3.2.2 ELECTRONIC WORD-OF-MOUTH.....	32
3.3 SOCIAL MEDIA	33
3.3.1 SOCIAL NETWORKS.....	37
3.3.2 WIKI.....	37
3.3.3 BUSINESS NETWORKING	38
3.3.4 VIDEO	38
3.3.5 MICROBLOGGING.....	38
3.4 SOCIAL MEDIA MARKETING.....	39
3.4.1 CHANGE IN THE MARKETING LANDSCAPE.....	39
3.4.2 ENGAGEMENT MARKETING.....	40
3.4.3 SOCIAL MEDIA MARKETING AND UNIVERSITIES.....	41
3.5 CONCLUSION.....	44
CHAPTER 4.....	46
4.1 INTRODUCTION	46
4.2 CONSUMER DECISION-MAKING PROCESS.....	46
4.3 TYPES OF CONSUMER DECISION MAKING.....	47
4.3.1 HABITUAL DECISION MAKING.....	48
4.3.2 LIMITED DECISION MAKING	48
4.3.3 COMPLEX DECISION MAKING.....	48
4.3.3.1 Step 1: Problem recognition.....	49
4.3.3.2 Step 2: Search for information	50
4.3.3.3 Step 3: Evaluation of alternatives.....	58
4.3.3.4 Step 4: Purchase decision	60
4.3.3.5 Step 5: Post-purchase evaluation	60
4.4 CONCLUSION.....	61

CHAPTER 5.....	62
5.1 INTRODUCTION.....	62
5.2 THE RESEARCH PROCESS.....	62
5.2.1 STEP 1: IDENTIFY THE MARKETING RESEARCH PROBLEM.....	64
5.2.2 STEP 2: DEFINE THE MARKETING RESEARCH PROBLEM.....	64
5.2.3 STEP 3: ESTABLISH THE RESEARCH OBJECTIVES.....	65
5.2.4 STEP 4: DETERMINE THE RESEARCH DESIGN.....	66
5.2.4.1 EXPLORATORY RESEARCH.....	66
5.2.4.2 CAUSAL RESEARCH.....	67
5.2.4.3 DESCRIPTIVE RESEARCH.....	68
5.2.5 STEP 5: IDENTIFY INFORMATION TYPES AND SOURCES.....	69
5.2.5.1 SECONDARY DATA.....	70
5.2.5.2 PRIMARY DATA.....	71
5.2.6 STEP 6: DEVELOP A SAMPLING PLAN.....	76
5.2.6.1 TARGET POPULATION.....	77
5.2.6.2 SAMPLING FRAME.....	77
5.2.6.3 SAMPLING METHOD.....	77
5.2.6.4 SAMPLE SIZE AND SAMPLE ELEMENTS.....	78
5.2.7 STEP 7: DESIGN RESEARCH INSTRUMENTS.....	79
5.2.7.1 STEP 1: TRANSLATE THE DATA REQUIREMENTS INTO A ROUGH QUESTIONNAIRE DRAFT.....	80
5.2.7.2 STEP 2: CHOOSE THE QUESTION STRUCTURE.....	81
5.2.7.3 STEP 3: CHECK QUESTION RELEVANCE AND WORDING.....	82
5.2.7.4 STEP 4: CHECK SEQUENCE OF QUESTIONS.....	82

5.2.7.5	STEP 5: CHECK LAYOUT AND APPEARANCE OF QUESTIONNAIRE	83
5.2.7.6	STEP 6: REVISE THE ROUGH DRAFT	83
5.2.7.7	STEP 7: PRE-TEST AND MAKE NECESSARY CHANGES.....	83
5.2.7.8	STEP 8: FINAL QUESTIONNAIRE AND ETHICAL CLEARANCE	84
5.2.8	STEP 8: COLLECTING DATA.....	84
5.2.9	STEP 9: CODING DATA	85
5.2.10	STEP 10: CAPTURE, CLEAN AND STORE DATA.....	85
5.2.11	STEP 11: DATA ANALYSIS.....	85
5.2.11.1	DESCRIPTIVE AND INFERENTIAL STATISTICS.....	86
5.2.11.2	RELIABILITY AND VALIDITY	86
5.2.12	STEP 12: PRESENTING THE FINDINGS	87
5.3	CONCLUSION.....	87
CHAPTER 6	88
6.1	INTRODUCTION	88
6.2	RESPONSE RATE AND RESPONDENT PROFILE.....	88
6.2.1	RESPONSE RATE	89
6.2.2	RESPONDENT PROFILE	89
6.3	DESCRIPTIVE STATISTICS	90
6.3.1	INFORMATION SOURCES USED BY STUDENTS IN UNIVERSITY CHOICE.....	91
6.3.2	USEFULNESS OF INFORMATION SOURCES USED BY STUDENTS	92
6.3.3	PERCEIVED CREDIBILITY OF SOCIAL MEDIA AS AN INFORMATION SOURCE	93
6.3.4	SOCIAL MEDIA PLATFORMS USED TO GATHER INFORMATION ON UNIVERSITIES (QUESTION 4).....	94

6.3.5	PERCEIVED INFLUENCE OF SOCIAL MEDIA ON THE DECISION- MAKING PROCESS	95
6.3.6	ACTUAL INFLUENCE OF SOCIAL MEDIA (QUESTION 15).....	96
6.3.7	SOCIAL MEDIA USAGE.....	98
6.3.7.1	Stay in touch with contacts.....	99
6.3.7.2	View pictures and videos	100
6.3.7.3	Make appointments with contacts	101
6.3.7.4	Share pictures and videos	102
6.3.7.5	Search for new contacts	103
6.3.7.6	Search for information about study	103
6.3.7.7	Search for information about university.....	104
6.3.7.8	Search for information about school	105
6.3.7.9	Read product reviews before purchase	106
6.3.7.10	Share opinions through forums	107
6.3.7.11	Review purchased products.....	107
6.3.7.12	Share experiences through blogs	108
6.3.7.13	Subscribe to RSS feeds	109
6.3.7.14	Vote in polls	110
6.3.7.15	Share information about sport or hobby.....	110
6.3.7.16	Share information about universities.....	111
6.3.8	SOCIAL MEDIA USAGE IN DIFFERENT AGE CATEGORIES	112
6.3.9	NUMBER OF TIMES STUDENTS ACCESS SOCIAL MEDIA PER DAY ...	113
6.3.10	HOURS A DAY STUDENTS SPEND ON SOCIAL MEDIA.....	114
6.3.11	DEVICES STUDENTS USE TO ACCESS SOCIAL MEDIA	115
6.4	INFERENCE STATISTICS.....	116
6.4.1	PERCEIVED INFLUENCE VS ACTUAL INFLUENCE.....	116

6.4.2 SOCIAL MEDIA USAGE (QUESTION 7).....	118
6.5 RELIABILITY	120
6.5.1 PERCEIVED CREDIBILITY OF SOCIAL MEDIA.....	121
6.5.2 PERCEIVED INFLUENCE OF SOCIAL MEDIA	122
6.5.3 ACTUAL INFLUENCE OF SOCIAL MEDIA.....	122
6.5.4 SOCIAL MEDIA USAGE.....	123
6.6 SUMMARY	124
CHAPTER 7.....	125
7.1 INTRODUCTION	125
7.2 SECONDARY OBJECTIVES OF THE STUDY	125
7.3 OTHER FINDINGS	128
7.4 RECOMMENDATIONS BASED ON FINDINGS	128
7.5 CONTRIBUTION TO THE SOUTH AFRICAN HIGHER EDUCATION MARKET ..	129
7.6 LIMITATIONS	129
7.7 SUGGESTIONS FOR FURTHER RESEARCH.....	130
7.8 SUMMARY	130
REFERENCES	131
ANNEXURES	
ANNEXURE A: QUESTIONNAIRE.....	147
ANNEXURE B: INVITATION TO PARTICIPATE IN QUESTIONNAIRE.....	157
ANNEXURE C: CODING MANUAL FOR DATA ANALYSIS.....	159
ANNEXURE D: DESCRIPTIVE STATISTICS.....	164
ANNEXURE E: INFERENTIAL STATISTICS.....	175
ANNEXURE F: RELIABILITY TESTS.....	182

LIST OF FIGURES

Figure 1: Steps in highly complex decision making.....	9
Figure 2: Public higher education institutions in South Africa.....	18
Figure 3: The conversation prism.....	36
Figure 4: Evolution of marketing	39
Figure 5: The consumer decision-making process.....	46
Figure 6: Involvement in decision making	47
Figure 7: Steps in highly complex decision making.....	49
Figure 8: Sets in decision making	51
Figure 9: Steps in highly complex decision making.....	54
Figure 10: The research process	63
Figure 11: Types of research design.....	67
Figure 12: Data sources.....	69
Figure 13: Types of survey methods	74
Figure 14: Questionnaire design process.....	79
Figure 15: Gender distribution of respondents	89
Figure 16: Age distribution	90
Figure 17: I use social media to stay in touch with contacts.....	100
Figure 18: I use social media to view pictures and videos	101
Figure 19: I use social media to make appointments with contacts	102
Figure 20: I use social media to share pictures and videos.....	102
Figure 21: I use social media to search for new contacts.....	103
Figure 22: I use social media to search for information about studies	104
Figure 23: I use social media to search for information about university.....	105
Figure 24: I use social media to search for information about school	105
Figure 25: I use social media to read product reviews before purchase	106
Figure 26: I share opinions through forums on social media.....	107

Figure 27: I use social media to review purchased products.....	108
Figure 28: I share experiences through blogs	109
Figure 29: Subscribe to RSS feeds	109
Figure 30: I use social media to vote in polls	110
Figure 31: I share information about sport or hobbies on social media.....	111
Figure 32: I share information about universities on social media.....	112
Figure 33: Number of times social media is accessed in a day.....	113
Figure 34: Hours spent per day on social media.....	114
Figure 35: Devices used to access social media	115
Figure 36: Perceived and actual influence of social media in selecting a university	116
Figure 37: Scatter plot matrix: Perceived and actual influence of social media.....	117

LIST OF TABLES

Table 1: Most popular websites in South Africa	6
Table 2: The 23 public higher education institutions in South Africa	17
Table 3: Top 12 most visited sites monthly (January 2015).....	35
Table 4: Social media marketing tools	42
Table 5: Information sources used in university choice.....	55
Table 6: Sources of consumer influence.....	57
Table 7: Choice factors evaluative criteria	59
Table 8: Advantages and disadvantages of secondary data.....	70
Table 9: Qualitative vs quantitative research	73
Table 10: Research objectives and survey questions matrix	80
Table 11: Information sources used by students in university choice	91
Table 12: Usefulness of information sources used	92
Table 13: Perceived credibility of social media (composite and individual scores)	94
Table 14: Social media platforms used	95

Table 15: Perceived influence of social media	96
Table 16: Actual influence of social media	97
Table 17: Social media usage – descriptive statistics	99
Table 18: Differences in social media usage between age groups	113
Table 19: Relationship between perceived and actual influence	117
Table 20: Descriptive statistics of the perceived credibility of social media variable on different age groups	119
Table 21: Kolmogorov-Smirnov test for normality	119
Table 22: Parametric hypothesis test	120
Table 23: Reliability results question 3	121
Table 24: Reliability results question 5	122
Table 25: Reliability results question 6	123
Table 26: Reliability results question 7	123

CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

Technology has become a significant part of the everyday lives of not only adults, but also young people, and the speed at which technology has been developing has fundamentally altered the way in which we live and companies do business (Badawy, 2009:219–220). Today, young people are at the core of this “digital media culture” (Montgomery & Chester, 2009:18), with 99% of South African students having access to the internet through computer labs on campus as well as on their mobile phones (Kronberger, 2009a).

This change in technology has also advanced media into a multifaceted and active assortment of “traditional and interactive media that seek to serve the needs of today’s fast paced lifestyles” (Daugherty, Eastin & Bright, 2010:18). Media trends have shifted as consumers now make their own media content choices instead of only relying on traditional media (Daugherty *et al.*, 2010:17). de Pelsmacker, Geuens and van den Bergh (2007) argue that companies, including universities, can benefit by changing the focus of their marketing activities to relationship marketing and specific communication for a narrow target market, instead of short-term profit and mass communication. Universities can start focusing on relationships with potential students and earn their loyalty instead of trying to persuade them to attend (de Pelsmacker *et al.*, 2007).

Sophisticated technology and Web 2.0 provide social marketers with various new media on the internet that can be used for promotion (Thackeray, Neiger, Hanson & McKenzi, 2008:338). One recent integrated marketing communication (IMC) channel that has become available to all, including universities, is social media. Social media refers to online communities that share information with one another by having online conversations (Safko & Brake, 2009:6). The popularity of social media has increased during the past decade, with a growing number of users using these services on a daily basis (Kim, Jeong & Lee, 2010:215; Cachia, Compañó & Da Costa, 2007:1179), making it “one of the fastest growing segments on the Web” (Bian, Liu, Agichtein & Zha, 2008:467). According to

Kronberger (2009b), the SA Student Media Report reported that almost “90% of students use the internet for social purposes a few times a week”. Thus, universities have to understand not only this new media, but also the users’ expectations (Garnyte & De Ávila Pérez, 2009:31).

Universities in South Africa are finding that they have to compete for students with an increasing number of other tertiary institutions both from within the country and from abroad (Wiese, van Heerden, Jordaan & North, 2009:40). In order to succeed, they should strive to better understand the decision-making process of students when choosing a university and find alternative ways of marketing to them. Traditionally forms of print media have been used to market to these students, but more consumers, especially students, are moving away from traditional media and focusing their attention more on interactive media like social media (Daugherty *et al.*, 2010:16).

Universities’ marketing campaigns can now be enhanced with the use of an increasing variety of social media as a result of Web 2.0 technologies and tools that are available to online users (Thackeray, *et al.*, 2008:338). These users are able to share their experiences of products, services, companies and also universities with their peers and the world, making social media a powerful word-of-mouth tool.

1.2 PROBLEM STATEMENT AND RESEARCH OBJECTIVES

Previous research on EBSCO, ProQuest Central, JSTOR and Springerlink has addressed several challenges of marketing higher education institutions (Gray, Fam & Llanes, 2003; Klassen, 2002; Hesketh & Knight, 1999; Gatfield, Barker & Graham, 1999; Mortimer, 1997) as well as student decision making (Maringe & Carter, 2007; Kotler & Fox, 1995; Chapman, 1986). However, no research has been done on how social media as an information source is used in the decision-making process of students in university choice in South Africa. Given the fact that students used mainly traditional media as information sources in their decision making in the past, the question that this study attempts to answer is what role social media has in the decision-making process of a student when selecting a university.

The primary research objective of this study was thus to determine the role of social media, as an information source, in the decision-making process of students when selecting a university. This objective was supported by the following secondary objectives:

- To determine the sources of information that students consult in university choice
- To investigate the usefulness of information sources that students consult in university choice
- To determine the credibility of social media as an information source
- To determine which specific social media platforms are the most popular amongst students
- To investigate if social media has an influence on the student decision-making process in university choice
- To determine if students in different age groups differ in their use of social media
- To determine how much time students spend on social media

An overview of the relevant literature is given in the next section.

1.3 LITERATURE REVIEW

The literature on the South African higher education environment, social media and decision making will be dealt with in the following sections.

1.3.1 SOUTH AFRICAN HIGHER EDUCATION ENVIRONMENT

Before 1994 there were 36 higher education institutions (universities and technikons) in South Africa. Due to government intervention, mergers took place between universities and that number was reduced to 23 universities and universities of technology (Jansen, 2003:294). A list of these 23 universities and universities of technology can be seen in Chapter 2 (Table 2). In 2013 there was a total of 983 698 students enrolled at these universities and universities of technology in South Africa (HEDA, 2015). These university students are spread throughout 7 of South Africa's 9 provinces, with no universities in the Northern Cape and Mpumalanga.

The 23 universities and universities of technology can be classified as either residential or distance learning universities. A residential university is a university where students need to attend class on a daily basis, whereas students of distance learning universities can study at their own pace and usually from home. Distance learning universities do not offer students the option of attending classes on a daily basis. Although some residential universities offer some distance learning courses, they are predominantly classified as residential universities.

Due to cost and logistical implications it was not feasible to conduct the study in all universities in South Africa. At the time of this study, of the 983 698 students in South Africa, 355 240 attended the largest distance learning university in South (HEDA, 2015). The remaining students attended residential universities. Thus, for the purpose of this study focus will be on first year students at the largest distance learning university in South Africa.

These universities all compete for students and need to be marketed using a variety of IMC channels in order to attract students. It is important for the marketers of a university to know what media influences the decisions students make in order to understand how to better market to the student that they want to reach (Constantinides & Fountain, 2007:239). One IMC channel that is starting to become more popular is digital media marketing, which includes social media.

1.3.2 SOCIAL MEDIA

Social media, which is part of digital media in the IMC mix, is a term that has been used a great deal over the past number of years. It can be described as online communities that share with one another by having conversations (Safko & Brake, 2009:6). These “conversations” involve sharing user-generated content including facts, opinions, experiences, personal beliefs and rumours using words, pictures, video and audio amongst participants (Xiang & Gretzel, 2010:180; Safko & Brake, 2009:6). Social media consists of various categories that are used to facilitate the dialogue between people. Today there is a comprehensive list of thousands of social media platforms available,

making it implausible to include all of them in this study. Thus for this study only the “Big 5” of social media were used (GetSmarter, 2012:13):

- *Facebook*: This falls into the category of online platforms coined “social networks”. These social networks allow members to share information about themselves and their interests with friends, professional colleagues and others. A member will be able to create a profile and update their profile with content such as text, video, audio, links and photos (Safko & Brake, 2009:26).
- *LinkedIn*: This is another type of social network and works on a similar basis to Facebook. The difference is that it focuses more on professional networking instead of social groups.
- *Twitter*: This is a type of social media platform also known as a micro blog. It is a service that enables the member to send short updates of no more than 140 words, or tweets, to everyone who has signed up to receive them (Gillin, 2007:192).
- *YouTube*: This falls into the media-sharing category which can include photo sharing, audio sharing and video sharing. YouTube includes tools that allow users to upload media, which can be distributed to anyone. Every time media is uploaded, a unique URL is created for the content.
- *Bloggging*: The term “blog” was derived from the word “web log” (Wertime & Fenwick, 2008:3). A blog is a personal website that acts as an online journal/diary. It contains text, images, audio and links. Blogs mostly focus on a specific topic that is important to a number of people (Gillin, 2007:6). An example of a tool that can be used to create these blogs is Blogger.com.

The user-generated content on these social media sites has become invaluable to millions of users (Agichtein, Castillo, Donato, Gionis & Mishne, 2008:184) as they seek authenticity and want to participate in the conversation, instead of just being on the receiving end of one-way communication (Scott, 2007:25). In the first quarter of 2015, Facebook reported 1.44 billion monthly active, in 2014 Twitter reported about 500 million users with 288 million of these users being active and YouTube had in excess of 4 billion views per day. LinkedIn grew immensely popular with 332 million users in 2014 and Pinterest recorded 70 million users in 2015. There are approximately 184 million bloggers and more or less 346 million people that read these blogs (Anon, 2015; Facebook, 2015; Zarrella, 2009:1), making this a viable, alternative marketing channel to use.

1.3.2.1 Two-way communication

Web 1.0's static websites only supported one-way communication, thus users could only view the content of the pages. The Web 2.0 environment provides the necessary tools for everyone to produce and maintain a presence online, to publish free content in the form of a video on YouTube, a blog on Wordpress, a tweet on Twitter, or a status update on Facebook, etc., without having any technical knowledge of updating a website. User-generated content is produced as a result of social media users jointly engaging in conversation (Young, 2009:40; Zarrella, 2009:2; Daugherty *et al.*, 2008:16; Thackeray *et al.*, 2008:338-339). Social media is a global trend and South Africans are also part of these conversations online. The top 20 websites visited daily by South Africans are listed in Table 1 below, and 8 of these websites are social media platforms (Alexa, 2015).

Table 1: Most popular websites in South Africa

#	Website	#	Website
1	Google.com	11	Fnb
2	Google.co.za	12	News24
3	Facebook*	13	Junkmail
4	YouTube*	14	Ask*
5	Yahoo	15	Pintrest*
6	LinkedIn*	16	Olx
7	Amazon	17	Blogspot*
8	Gumtree	18	Mybroadband*
9	Wikipedia*	19	Kickass.so
10	Twitter*	20	Standardbank

* Social media platforms

Source: Adapted from Alexa (2015).

The information presented in Table 1 above indicates that social media has potential as a marketing channel in South Africa. In South Africa, Facebook is the third most popular website after Google and the most popular social media website (Alexa, 2015). A previous study conducted shows that 90% of students in South Africa access the internet a few times a week for socialising (Kronberger, 2009b). This may be due to the fact that students have an instant peer support network just by logging on to a social media platform (Graham, Faix & Hartman, 2009:228). This channel of marketing can become more important in reaching the youth segment such as university students, as traditional

marketing channels are “being substituted by networks of individual and small-group influencers” (Gillin, 2007).

1.3.2.2 Social media as a marketing channel

The traditional marketing communications mix consists of eight elements, namely advertising, personal selling, sales promotion, publicity, public relations, sponsorships, direct marketing and e-communication, which are used by universities on a daily basis to market products and services (Thackeray, *et al.*, 2008:338; du Plessis, Bothma, Jordaan & van Heerden, 2005:4). The emergence of Web 2.0 has provided new marketing platforms, and companies can now also consider social media, which is part of digital media, to market their products. This is done by encouraging people to share their experiences of products, services and companies with their peers. Coca-Cola launched a Coca-Cola Challenge campaign on YouTube where they encourage consumers to upload videos of creative uses for everyday household items. Companies like Heinz, Kleenex, M&M and Pepsi have used social media to personalise products for their customers (Constantinides & Fountain, 2007:241–242).

Companies now also have the opportunity to communicate directly with their consumers via blogs, podcasts, e-books and social networks in a form that their consumers understand and welcome (Mangold & Faulds, 2009:357; Thackeray *et al.*, 2008:338; Scott, 2007:26). Fast food giant McDonalds’ Vice President Bob Langert has a blog where he posts a variety of information on a weekly basis and encourages consumers to participate in the discussion, be it positive or negative (Constantinides & Fountain, 2007:241).

Consumers’ awareness, opinions and attitudes are being influenced by social media marketing campaigns (Mangold & Faulds, 2009:357; Thackeray *et al.*, 2008:338) “as social media now offers marketers the chance to engage with their customers in a whole new way” (Gillin, 2007). They communicate with their customers directly, providing them with useful information, and as trust is built, customers develop loyalty that makes for a long-lasting relationship. According to Barnes and Barnes (2009:31), Twitter is being utilised in the marketing practices of a major US airline as they provide their customers with “real-

time” information and feedback. They also utilise the customers’ “tweets” on Twitter to check customer satisfaction. Decision making will now be discussed in more detail.

1.3.3 DECISION MAKING

The concept of how consumers make decisions in business and commercial contexts has challenged researchers for many years (Maringe & Carter, 2007:460; Sirakaya & Woodside, 2005:815). Decision making can be seen as a process of solving problems and is thus commonly referred to as the decision-making process (Maringe, 2006:468). The decision-making process will now be briefly discussed.

1.3.3.1 Decision-making process

Everyone goes through the decision-making process often several times each day, as decisions are made every time a purchase is made (Saaty, 2008:83). Some decisions will only need low involvement, for example buying bread or toothpaste. Complicated or expensive products or services, such as buying a car or selecting a university to attend, on the other hand, will require a more involved and longer decision-making process (Sirakaya & Woodside, 2005:817; Moogan, Baron & Harris, 1999:212). The normal decision-making process usually consists of five stages through which a consumer goes when making a decision (Maringe & Carter, 2007:460; Maringe, 2006:468; Wright, 2006:27; Hawkins, Best & Coney, 2001:505;):

- problem recognition;
- information search;
- evaluation of alternatives;
- purchase decision; and
- post-purchase evaluation.

This decision-making process works well in business and commercial contexts for individuals making everyday purchases. Selecting a university to attend, however, is a very complex decision and the normal decision-making process is not sufficient for this decision, and therefore Kotler and Fox’s (1995:251) highly complex decision making model will now be discussed.

1.3.3.2 Highly complex decision-making model

Kotler and Fox (1995:251) adapted the decision-making process and developed a more complex decision-making model aimed specifically at decisions involving the selection of a higher education institution. The model accommodates the factors that contribute to the complexity of choosing a university, as can be seen in Figure 1 below.

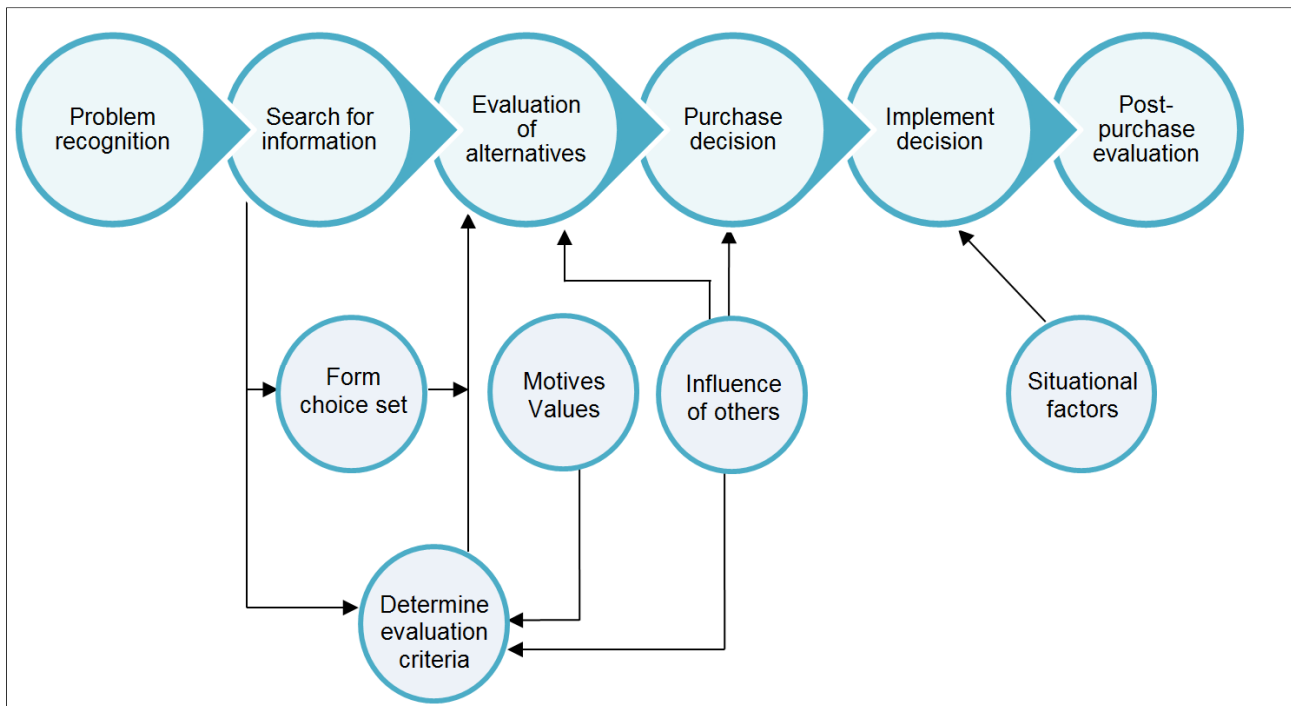


Figure 1: Steps in highly complex decision making

Source: Adapted from Kotler and Fox (1995:251).

This model has been used in previous research studies. For example, Raposo and Alves (2007) used this decision-making process to investigate the factors that influence students' choice of university, and Băcilă (2008) used it to explore Grade 12 students' behaviour in the decision-making process of educational approaches. The steps in this complex process are briefly discussed below and will be dealt with in detail in Chapter 4 (Kotler & Fox, 1995:251–252):

- *Problem recognition:* This is the first step in the decision-making process, often referred to as need arousal. Hawkins *et al.* (2001:508–509) argue that if there is no need arousal, there cannot be a decision that needs to be made. Before potential students realise that they have a need, they are already thinking about their futures and what career they would like to pursue. Marketers at universities can help prospective students recognise the need to go to university, by using integrated

marketing communication. An array of integrated marketing communication tools is available to them, including social media.

- *Information search:* Once these prospective students have realised that they have a need to attend a university, they will start gathering information about the various university choices available to them. During this time, they are passively collecting information about universities that they are exposed to and they are unknowingly forming a conceptual list of universities to consider. Information on the various universities is gathered from various sources, including print media, online media and open days (Wiese, van Heerden, *et al.*, 2009:45).
- *Evaluating alternatives:* As soon as the students have all the necessary information that is needed, they will put together a list of criteria for selecting a university. These criteria will be used to evaluate the different universities and can range from location to the academic offering depending on the students' preferences (Hawkins *et al.*, 2001:569). Once all the universities have been evaluated against the criteria, the potential students will have one or more universities that they will apply to, known as the choice set.
- *Purchase decision and decision implementation:* After the choice set is in place, the students will use information gathered to make a decision. Influences from others will also have a big impact on this step. It is believed that social media can also play a role in this step of the decision-making process. Students could have applied to a few universities in their choice set. The outcome of the application process will also have an influence on the final decision that is made. The students will make their final decision and accept their place at a university.
- *Post-purchase evaluation:* This will only happen once the students start to study at the institution; only then will they evaluate the service and decide whether they are satisfied or dissatisfied with the decision to study at the chosen university. There is an array of determinants of satisfaction with university choice, including core service failure, service encounter failures, pricing and ethical problems that the student can encounter (Hawkins *et al.*, 2001:640).

Taking the above discussion into consideration, this study attempts to provide information on social media's role as an information source, as well as its influence on students' decision-making process when choosing a university.

1.4 RESEARCH DESIGN AND METHODS

The study aimed to discover the role that social media plays as an information source in the decision-making process of first-year students in selecting a university to attend and were descriptive in nature. In order to collect responses an online self-administered questionnaire was used in this study.

The target population for the proposed study consisted of first-year students in the College of Economic and Management Sciences (CEMS) at the University of South Africa (Unisa). For the purpose of this study, only first-year students were selected as these students had recently been through the process of selecting a university. Grade 12 learners were not included as they still need to make a choice and have not yet gone through all the necessary decision-making steps. The units of analysis were the individual first-year students.

The sample was selected using probability sampling in the form of simple random sampling, by using computer software to randomly select the sample. Simple random sampling provides each element in the population with an equal chance of being selected for the survey (Malhotra, 2010:382). Probability sampling was selected for this study as it is more statistically sound than non-probability sampling. The aim of this research study was to achieve a minimum of 150 responses. The study was ethically cleared by the Ethics committee and no respondents under the age of 18 were sent a questionnaire. The qualifying question also asked respondents to confirm that they are older than 18 years of age. The survey was sent to 10 000 respondents.

The structured online self-administered questionnaire was designed to obtain specific information regarding social media use by first-year students and its influence on their decision making process. The first question measured the sources students used to acquire information on different universities. The second question determined the usefulness of different information sources in selecting a university. Question 3 measured the perceived credibility of social media as an information source. Question 4 measured the most popular social media platform used to gather information on universities. Questions 5 and 6 dealt with perceived and actual influence of social media as an

information source, respectively. Question 7 measured the students' use of social media, and questions 8, 9 and 10 dealt with the amount of time that the students spent on social media per day, how many times they accessed social media and what devices they used to access social media. The final two questions were used to acquire demographic information.

An email with a link to the online survey was sent to the respondents over a period of two weeks. No incentives were given to respondents to complete the questionnaire (the questionnaire is included in Annexure A).

The data collection instrument was pre-tested on a representative sample of respondents. They were asked to highlight potential problems in the questionnaire and questions that were not clear. The questionnaire was adapted accordingly before being sent out.

1.5 CHAPTER OUTLINE

Chapter 1 presented the background of the study. An introduction to the South African higher education environment was provided, together with information on decision making and social media. The research problem was formulated and the primary and secondary objectives of the study were stated. Thereafter, the research design and methodology used were discussed briefly.

Chapter 2 covers the South African higher education environment. The history of the higher education landscape is first examined, followed by a discussion of South African public universities. Thereafter service marketing and marketing communication in higher education institutions are discussed.

Chapter 3 focuses on social media as a marketing channel. The discussion starts with Web 2.0 and all the different types of social media. The chapter ends with social media marketing.

Chapter 4 discusses the decision-making process in detail. Each step in the process is discussed, the different types of decision-making processes are highlighted and the

chapter concludes with a discussion of the influence of information sources on university choice.

Chapter 5 focuses on the research methodology used in this study. The entire research process is described, starting with the research design and followed by the sampling approach, data collection approach, the questionnaire design, measurement and data analysis approach.

Chapter 6 presents the findings of the empirical research. These findings are discussed in detail and analysed and are then used in the last chapter to formulate conclusions and recommendations.

Chapter 7 presents the outcomes of the study and a detailed discussion is provided, relating the outcomes to the objectives. Recommendations are also given for managerial level as well as with regard to future research studies.

CHAPTER 2

HIGHER EDUCATION IN SOUTH AFRICA

2.1 INTRODUCTION

South Africa's higher education landscape has seen a fair amount of change taking place in the last 20 years of democracy. It was restructured with the help of task teams assigned to consider various aspects such as legislation, transformation and funding. This resulted in the formation of new universities and universities of technology. The higher education environment is also seeing the rise of competition, not only in the public sector, but from the private sector as well. These changes have led to higher education institutions having to compete for students.

With the higher education landscape expanding every year, universities are seeing record numbers of students seeking tertiary education. The quantity of students in South Africa is not the problem, but with the new funding structure, higher education institutions will need to find new ways of attracting quality students. This can be a challenge, as Generation Y is the target of higher education institutions and it appears as if mass media is no longer the only viable channel to communicate with this generation. They depend on technology to communicate with one another and an integrated marketing approach will need to be followed in order to incorporate the digital media channels that are becoming more prominent.

In this chapter a brief history is given of the higher education landscape in South Africa. The rest of the chapter will focus on the current situation of higher education in South Africa, service marketing characteristics and the service marketing mix, as well as IMC, changes affecting higher education institutions and digital media marketing. It is important to note that this study was conducted from the perspective of the student and not that of the university. It is, however, significant to give an introduction to the South African higher education landscape from a university perspective and the marketing practices that are used, in order to draw relevant conclusions at the end.

2.2 HISTORY OF THE HIGHER EDUCATION LANDSCAPE IN SOUTH AFRICA

Higher education in South Africa can be traced back to 1829 when the first institution, namely the South African College, was established to equip students for Grade 12 and degree examinations with the University of London (Behr & Macmillan in Holtzhausen, 2006:18). This was the starting point of a South African higher education landscape with a rich history. The higher education environment underwent major changes and one of the most significant milestones was its restructuring between 1994 and 2004.

The restructuring started with the National Commission on Higher Education which released the first important document called “*A Framework for Transformation*” in 1996. This document contained suggestions on what the shape and size of higher education should be and the different types of higher education institutions available in South Africa at that stage (Jansen, 2003:294). During 1997 two important documents were released, namely an education White Paper called “A programme for the transformation of higher education” as well as the Higher Education Act (Reddy, 2004:61).

After a few years, the “*National Plan for Higher Education*” was released in 2001 by the Minister of Education. This document suggested that the number of public higher education institutions in South Africa should be decreased (Reddy 2004:61; Jansen, 2003:294). At this point in time, however, it was not known how many institutions there would ultimately be and what method government wanted to use to reduce the number of institutions. A recommendation was later made that the number of higher education institutions be decreased by means of mergers. The universities and technikons that would be affected by this decision and how they would be affected were listed in a report entitled “*Restructuring of the Higher Education System in South Africa*” (Jansen, 2003:294).

These mergers took place between 2000 and 2005 and were mainly done with the intention of achieving government’s objectives for equity, efficiency and development (Bonnema & van der Waldt, 2008:315). As a result of the restructuring and mergers, new institutions were formed, technikons became universities of technology and comprehensive universities were introduced into the landscape (Council on Higher

Education, 2009:3; Bonnema & van der Walddt, 2008:315). This reduced the number of institutions to 23 public institutions, which includes 11 universities, 6 comprehensive universities and 6 universities of technology (Council on Higher Education, 2009:8).

2.3 SOUTH AFRICAN PUBLIC UNIVERSITIES

The Council on Higher Education (2009:8) distinguishes between public higher education institutions as universities, comprehensive universities and universities of technology. Universities offer “a mix of programmes, including career-orientated degree and professional programmes, general formative programmes and research master’s and doctoral programmes”, whereas comprehensive universities offer programmes across the spectrum, from research degrees to career-orientated diplomas (Council on Higher Education, 2009:8; Reddy, 2004:36; Ministry of Education, 2001:49, 54). A university of technology can be distinguished by five elements (Vaal University of Technology, n.d.):

- career-orientated programmes that educate and prepare students for real world of work;
- appropriate programmes where the industry has inputs into all diploma and degree programmes;
- real-life hands-on programmes that focus on what the students should know and how to apply the knowledge;
- qualification includes work-integrated learning, or experiential learning so that when graduates enter the workplace they can “hit the ground running”; and
- applied research that is practical and seeks solutions to modern-day problems.

These higher education institutions are also further classified as either residential or distance learning universities. A residential university is a university where students need to attend class on a daily basis, whereas students of distance learning universities can study at their own pace and usually from home. Unisa is the only fully distance learning institution in South Africa. Although other universities might have a distance learning component, they are still seen as residential universities.

The 23 public higher education institutions can be seen in Table 2 below. They are randomly spread across South Africa's 9 provinces with Gauteng, the Western Cape, Eastern Cape and KwaZulu-Natal having the most institutions, as can be seen in Figure 2 below (Council on Higher Education, 2009:8). These public higher education institutions had 983 698 students enrolled with them in 2013 (HEDA, 2015). More than a quarter of these students were enrolled at Unisa, making it the largest distance learning university in South Africa.

Table 2: The 23 public higher education institutions in South Africa

Universities		Comprehensive Universities		Universities of Technology	
1	University of Cape Town	12	University of South Africa	18	Cape Peninsula University of Technology
2	University of Fort Hare	13	Nelson Mandela Metropolitan University	19	Central University of Technology
3	University of the Free State	14	University of Johannesburg	20	Durban University of Technology
4	University of KwaZulu-Natal	15	University of Venda	21	Mangosuthu University of Technology
5	University of Limpopo	16	Walter Sisulu University	22	Tshwane University of Technology
6	North-West University	17	University of Zululand	23	Vaal University of Technology
7	University of Pretoria				
8	Rhodes University				
9	University of Stellenbosch				
10	University of the Western Cape				
11	University of the Witwatersrand				

Source: Council on Higher Education (2009:6).

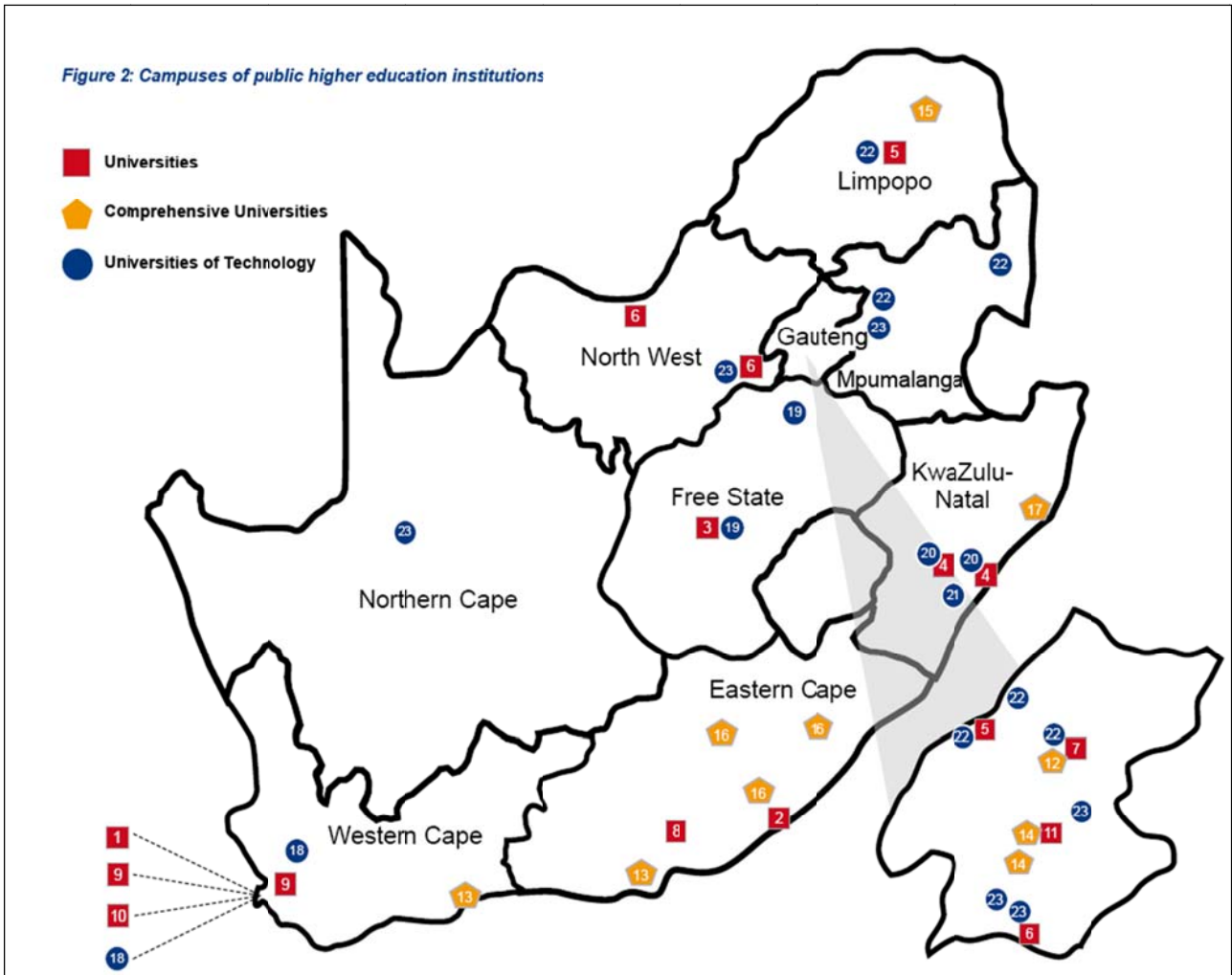


Figure 2: Public higher education institutions in South Africa

Source: Council on Higher Education (2009:6).

These higher education institutions are all selling a service and competing for the same target market. They have to market to this target market in the correct manner in order to achieve success in the long term.

2.4 SERVICE MARKETING AND HIGHER EDUCATION INSTITUTIONS

A service can be defined as “an act performed by one person or a group that benefits another” (Cant & van Heerden, 2010:450). Services are divided into four categories, namely service industries, services as products, customer service and derived services (Zeithaml, Bitner & Gremler, 2006:5). Higher education can be classified under the service industry category, with its core product being a service, namely education. Marketing of

services differs from marketing of goods, as services have unique characteristics. These characteristics are (Zeithaml *et al.*, 2006:22-24):

- *Intangibility*: Unlike goods, services such as higher education cannot be touched, smelled, tasted or seen, as they are actions being performed. Intangibility makes it difficult to market higher education services as they cannot be inventoried or displayed. It is also very difficult to price something whose value cannot be seen.
- *Heterogeneity*: Higher education, like any other service, needs people to perform the service. This makes it impossible to perform the service the same way more than once, as people differ from one another. Students, who are the customers, also differ from one another, so they experience the same service delivery differently. Successful delivery of the service depends on the employees of the higher education institution and satisfaction of the customer. The heterogeneity aspect also makes it difficult to measure if the planned service was delivered, as it cannot be matched against actual service delivery.
- *Perishability*: Higher education cannot be stored, saved, resold or returned. A student cannot buy higher education today, store it in a cupboard and use it in 10 years' time. Once the higher education service has been delivered, the students cannot ask for their money back because they failed. A service thus cannot be returned if the students are not satisfied. Perishability is also a problem when it comes to synchronising supply of and demand for the higher education service.
- *Inseparability*: Higher education cannot be separated from its use; it is produced and consumed simultaneously. Students are part of the higher education service; if they do not use the service, they will not be able to complete the course that they enrolled for. Higher education thus cannot be mass produced and stored for future use.

These characteristics of services have an influence on the marketing of the higher education service. The marketing mix is one of the most basic concepts in marketing; it is "a set of controllable marketing tools that an institution uses to produce the response it wants from its various target markets" (Ivy, 2008:289). Traditionally, the marketing mix used for products consists of four Ps, namely the product, price, promotion and place. Higher education institutions, however, offer a service, and therefore use an adapted marketing mix called the service marketing mix which consists of seven Ps (Kotler & Fox, 1995:276).

The service marketing mix includes the four Ps used for goods namely product, price, promotion and place as well as an additional three Ps, namely process, physical evidence and people. The seven Ps of the service marketing mix are therefore as follows:

- *Product*: The product refers to the goods or services that the company sells. In the case of a higher education institution, this product is a complex collection of benefits based on consumer needs and not a straightforward, physical set of features (Ivy, 2008:289). Kotler and Fox (1995:276) refers to the product as the programme in the higher education service marketing mix. The category “programme” not only includes the educational programme that the student is enrolled for, but also the extracurricular programmes, personal growth programmes, medicinal services and “future planning” services such as career counselling that the higher education institution offers (Kotler & Fox, 1995:277).
- *Price*: This is the price that the higher education institution charges students for its programmes. The price of the service must reflect the value the service has to the consumer (Cant, 2010:26). As discussed earlier, pricing is one of the many challenges that marketers face with marketing services as they are not a tangible product.
- *Promotion*: Promotion consists of all the methods that are used to communicate with the target market of the higher education institution. Ivy (2008:290) argues that when the target market of the university is taken into account, the use of only a prospectus and website is likely to be ineffective. It is necessary to communicate to a specific public through a specific method. The higher education institution will thus need to communicate with potential and current students at the right time through the correct method (Cant, 2010:26).
- *Place*: Place is synonymous with the distribution of the tuition to the student. Where and how the higher education service will be distributed and made available to students is of concern here (Cant, 2010:26). Students can purchase the service directly from the institution, or in the case of an online course, purchase it via the internet. It all depends on the distribution network that the higher education institution makes available to its customers.
- *Process*: This is when the actual delivery of a service takes place (Zeithaml *et al.*, 2006:27). It consists of the administrative roles that the university undertakes, such as registration enquiries, examinations and graduations to name a few (Ivy,

2008:290). It is a very extensive process as the students need to go through a few years of service delivery before they complete their degree.

- *Physical evidence*: This is the environment where the service is delivered or where interaction between the institution and the customer takes place (Zeithaml *et al.*, 2006:27). This can include, but is not limited to, aspects such as lecture halls, facilities, quality of campus surroundings, brochures, study guides, tutorial letters and parking.
- *People*: In the service marketing mix people are defined as any individual who is part of or can influence the service delivery process (Zeithaml *et al.*, 2006:26). In higher education this includes the university staff such as lecturers, marketers and administrative staff. It also includes the students, who are the customers of the higher education institution, and other customers in the service setting.

When universities take all of the service marketing mix elements into consideration, they can offer students quality qualifications, which will in turn help them receive the maximum number of enquiries and acquire quality students (Ivy, 2008:289).

2.5 MARKETING COMMUNICATION OF HIGHER EDUCATION INSTITUTIONS

Kotler (1979:39) points out that universities' marketing efforts consist mainly of promotional activities, but promotion only is not successful at all times. Marketing is so much more than just promotion; it is about research, planning and developing a strategy to understand and meet customer needs with the aid of various marketing communication elements (Ziegler in Beneke, 2011:31). Universities could simply allow students that have applied to their institution and students could simply apply to universities that they have heard of (Kotler & Fox, 1995:249). Universities have to market themselves, in order to attract students to apply to their institution.

2.5.1 INTEGRATED MARKETING COMMUNICATION

IMC has received a lot of attention in the last decade, not only in academic literature but also in the business world. An array of explanations for the concept of IMC are in circulation but no formal definition is available.

Peltier, Schibrowsky and Schultz (2003:93) define IMC as “a concept of marketing communication planning that recognizes the added value of a comprehensive plan that evaluates the strategic role of a variety of communication disciplines and combines these disciplines to provide clarity, consistency and maximum communication impact”. Peltier, *et al.* (2003:93) further indicate that the use of comprehensive strategies to evaluate the strategic roles of various communication disciplines adds value, which is identified by IMC. Mangold and Faulds (2009:357) argue that IMC produces integrated customer-focused communication by attempting to organise and manage a range of promotional mix elements. IMC is also defined as “the integration of various marketing-communication elements to provide added value to the customer and increase positive relationships” (du Plessis *et al.*, 2005:30).

By taking all of the above definitions into consideration, the following definition for IMC will be used in this study:

IMC is an all-inclusive customer-focused concept that incorporates, arranges and manages a variety of marketing communication elements in order to add value and provide clarity and consistency to the customer with maximum impact.

IMC is used as a guideline that organisations/institutions use to communicate with the target audience, and is vital to the organisation to achieve synergy in communication with the customers (Cant, 2010:175; Mangold & Faulds, 2009:357). IMC typically uses databases to classify customers into target markets so an opportunity can be created to generate a personal, two-way dialogue with them (Nieman, Crystal & Grobler, 2003:25). Customers are showered with information on a daily basis, which is resulting in more organisations acknowledging the viewpoints of IMC and using it as an instrument for effective communication and as a method for survival (Nieman *et al.*, 2003:22). According to Kitchen, Schultz, Dongsun and Li (2004:1417), IMC is in fact an essential component of

numerous companies' marketing and corporate communication strategies. As competition in the university environment is increasing, universities could also make use of IMC to diversify their marketing communication.

The IMC mix consists of eight elements, namely advertising, digital media marketing, direct marketing, personal selling, public relations, publicity, sales promotion and sponsorships (Cant & van Heerden, 2010:326; Thackeray *et al.*, 2008:338; du Plessis *et al.*, 2005:4). These are all used in combination by most organisations to communicate with customers (du Plessis *et al.*, 2005:2). The elements of integrated marketing communication are:

- *Advertising*: Advertising can be defined as “the placement of announcements and persuasive messages in time or space, purchased in any of the mass media by business firms, non-profit organisations, government agencies and individuals who seek to inform and/or persuade members of a particular target market or audience about their products, services, organisations or ideas” (American Marketing Association, 2011). Consumers of products and services come into contact with advertising on a daily basis through all of the media channels (Kotler & Fox, 1995:368).
- *Personal selling*: van Heerden and Drotsky (2011:7) define personal selling as “the process of person-to-person communication between a salesperson and a prospective customer in which the former learns about the latter’s needs and seeks to satisfy those needs by offering the prospective customer the opportunity to buy something of value, such as a good or a service”. Personal selling can also be characterised by being flexible, aiding in building relationships, allowing for proficient communication, being a form of dyadic communication, being costly and bringing forward unethical practices (van Heerden & Drotsky, 2011:7). Personal selling cannot be the only communication element used by a company as it supports and is improved by the other communication (du Plessis *et al.*, 2005:175).
- *Sales promotion*: Personal and impersonal techniques that are used in efforts to encourage customers to purchase an organisation’s products or services are known as sales promotion. These methods cannot be considered as advertising, personal selling, or publicity. Instead it complements these methods as they support to

communicate the marketing message to potential customers or resellers (du Plessis *et al.*, 2005:31).

- *Publicity*: The concept of publicity can either be corporate publicity or marketing publicity. du Plessis *et al.* (2005:317) define the element of corporate publicity as “non-personal communication regarding an organisation, its position towards issues, and its activities”. This includes communication such as news stories, editorials and announcements. On the other hand, du Plessis *et al.* (2005:317) define marketing publicity as “non-personal and not directly paid for communication concerning an organisation’s products, services and brands”. A company will attempt to get publicity by creating material using methods such as community involvement, exclusives, interviews, leaked information, media launches, press releases and press conferences that will motivate the media to report about the company (du Plessis *et al.*, 2005:318).
- *Public relations*: The Public Relations Institute of Southern Africa defines public relations as “management, through communication, of perceptions and strategic relationships between an organisation and its internal and external stakeholders” (Cant & van Heerden, 2010:355). The main focus of a company’s public relations department is to facilitate communication between the company and the various stakeholders. Public relations functions also include media relations and placement, organising, writing, production, speaking and training (Cant & van Heerden, 2010:344).
- *Sponsorships*: Sponsorship, according to Cant and van Heerden (2010:344), can be defined as “the alignment of a brand with an activity in order to exploit commercial potential created by the association, thereby positively impacting brand image and/or sales among the sponsor’s target marketing in order to attain marketing and corporate objectives”. Types of sponsorships include national team sponsorship, provincial team sponsorship, league sponsorship, individual club sponsorship, individual athlete sponsorship, development sponsorship and multi-sponsorship (Cant & van Heerden, 2010:346).
- *Direct marketing*: Spiller and Baier (2004:4) define direct marketing as “an interactive system of marketing that uses one or more advertising media to effect a measureable customer response or transaction at any location and stores information about that event in a database”. Because it is often a two-way communication process where

the company communicates with the customer and the customer responds back, direct marketing is also known as interactive marketing (Spiller & Baier, 2004:4). One of the main factors that distinguishes direct marketing from other communication elements is that it creates a measurable response at all times (Spiller & Baier, 2004:4). Catalogue marketing, direct mail marketing, direct response television marketing, kiosk marketing, online marketing, personal selling and telephone marketing are the main types of direct marketing (Armstrong & Kotler, 2003:539).

- *Digital media marketing*: Formerly known as e-communication, digital media marketing, according to Cant and van Heerden (2010:334), can be defined as “channels of communication with which the audience can participate actively and immediately”. It includes company websites, search engine marketing, online advertising, email marketing, blogging, podcasting, affiliate marketing, viral marketing, mobile media and social media (Cant & van Heerden, 2010:357–358).

Universities should understand how to use these communication elements to reach students and what to say to them in order to communicate successfully with them (Goetz & Barger, 2008:40). The customer is central to IMC and universities should be able to speak their students’ language and communicate to them where they already are (Goetz & Barger, 2008:27).

2.5.2 CHANGES AFFECTING THE MARKETING OF HIGHER EDUCATION INSTITUTIONS

The higher education landscape in South Africa and internationally has changed dramatically, and competition for limited resources such as funding, students and staff has increased. This is not only between public universities, but between public and private higher education institutions as well (Wiese, van Heerden, *et al*, 2009:26, 40). Bonnema and van der Waldt (2008:314) believe that perceptions and behaviour of students have also been impacted by these changes in higher education. Some of these changes can affect the way in which higher education institutions are marketed. Three of these changes that could be affecting marketing are the funding structure, Generation Y and technology.

- *Funding structure*: The government funding structure is one of the changes that has had an impact on the landscape, especially with regard to how and where universities

are marketing themselves. In the past, universities in South Africa received their main source of income from the government with their only reporting obligation being academic performance (Beneke, 2011:29). Passive student recruitment occurred — universities regarded marketing as “pointless spending”, as they did not need to attract the best students or get more students to enrol since there was already a steady supply of students (Naude & Ivy, 1999:126). Regulations regarding government funding became stricter after the restructuring of the higher education landscape. One of the changes that university funding underwent is that universities now receive funding based on the number of active students after the first quarter of the year. If students drop out before the end of the first quarter, the funding for those students is lost. Universities have started to realise that they are not operating alone, but have to start competing for more quality students (Naude & Ivy, 1999:126). As a result of this intensified competition, universities only realised the importance of marketing in the last decade. They need to develop a competitive advantage and communicate this effectively to their target market, like any other commercial organisation, in order to survive (Bonnema & van der Waldt, 2008:315; Mzimela, 2002; Wiese, 2008:26–27). Universities need to draw the attention of their marketing communication to attracting quality first-year students, which will ensure that the maximum funding is received from government (Wiese, van Heerden, *et al.* 2009:40).

- *Generation Y and technology*: The majority of higher education students today were all born between 1989 and 1996, making them all part of Generation Y (Berk, 2010:2; Goetz & Barger, 2008:26). Generation Y is a term that is used to identify people that were born roughly between 1980 and 2003. This generation can be distinguished by the fact that they have “never experienced life without computers” (Goetz & Barger, 2008:26). They have mostly likely never experienced a day without technology. Generation Y is the first generation who grew up with the internet, believe that downloading music, instant messaging and phoning friends on their mobile phones are standard practice and witnessed the beginning and explosion of MP3 files, iPods, digital cameras, Web 2.0, social media such as Facebook and the extensive use of Google as a verb (Goetz & Barger, 2008:27).

Generation Y do not take well to traditional media, as they expect information to be available at a click of a button (Berk, 2010:4; Goetz & Barger, 2008:26). This is why higher

education institutions have to reconsider the way in which they communicate with potential and current students. Generation Y expect businesses, services, technology and higher education institutions “to keep up with them, not the other way around” (Goetz & Barger, 2008:26).

2.5.3 HIGHER EDUCATION INSTITUTIONS: CURRENT AND DIGITAL MEDIA MARKETING

Traditional marketing strategies need to be revised as a result of changes that have taken place in higher education, as well as changing consumers. Higher education institutions mainly use three types of marketing communication, namely public relations, marketing publications and advertising (Kotler & Fox 1995:39) Some of the most popular communication media that South African universities use include advertisements on radio, in newspapers, brochures and posters. They also frequently make use of special events and open days where they distribute promotional material to students (Wiese, van Heerden, *et al.*, 2009:40). Universities are currently mostly making use of a “top-down” approach to marketing communication, where customers are not talked *to* but talked *at*, as messages are pushed onto them (Edelman in Bonnema & van der Waldt, 2008:315). This traditional mass media is used because it is capable of reaching large numbers of students at one time at a relatively low cost (Hongcharu & Eiamkanchanalai, 2009:31).

Customers’ information needs are also changing as they are becoming more knowledgeable and increasingly sceptical when it comes to marketing communication (Nieman *et al.*, 2003:22). They no longer believe everything that a company communicates about its product, but will investigate themselves. This leads to the next set of changes that have taken place. Nieman *et al.* (2003:22) believe that “customers collaborate their own information, experiences and preconceptions of organisations, products and brands”. However, universities can no longer rely only on these types of marketing communication, as the different stages of a service life cycle should utilise different communication tools (Kitchen *et al.*, 2004:1420). A study by Wiese, Jordaan and van Heerden (2009:68) found that potential students in South Africa find information like campus visits, open days, university publication and websites as being more useful than mass media.

New technology has brought new prospects within marketing communication, and has changed marketing communication into a convenient, interactive, relationship-building experience rather than the traditional one-way message (Hongcharu & Eiamkanchanalai, 2009:31). During the last decade digital media such as the internet, World Wide Web, email, social media and mobile technology has become everyday media, resulting in it becoming more important in marketing activities (Cant & van Heerden, 2010:327). The fast growth of the internet has changed the way people communicate and is differentiated from traditional media by transparency, interactivity and memory (Gurău, 2008:171). Since the beginning the internet has been a popular marketing communication channel as it is convenient and cost-effective and facilitates interactive communication with target customers (Hongcharu & Eiamkanchanalai, 2009:32). The internet evolved even more and new tools for communication were made available with the occurrence of social media (Mangold & Faulds, 2009:357). Social media as a marketing channel will be discussed in more detail in Chapter 3.

Universities currently utilise digital media marketing communication in the form of their official websites and more recently on social media pages on Twitter and Facebook, as well as promotional videos on YouTube. It is important for universities to understand the way in which students collect and process information so that marketing communication can be planned effectively (Nieman *et al.*, 2003:24).

The use of social media as a marketing communication media is researched further in this study to determine if efforts made by universities to market via social media are influencing students' decision making.

2.6 CONCLUSION

The South African higher education landscape is turbulent and the effects of the changes made to it can still be seen. The history of higher education in South Africa was discussed briefly and the milestone of restructuring was examined in more depth. This discussion provided insight into the environment in which the universities need to make their marketing decisions. The higher education landscape is also seeing the rise of competition which has led to institutions having to compete for students. Changes such as those to the

funding structure, the changing profile of the student (Generation Y) and technology also affect the marketing decisions made. Universities were identified as service institutions with different characteristics that distinguish them as a service that sells education as its product. The use of promotion alone in this industry cannot be successful and an integrated marketing approach should be considered. Universities will need to investigate new digital media and understand how to communicate to potential students. Understanding how students make the decision on which university to attend can shed some light on how they use the information sources available to them. In the next chapter, social media as a marketing channel will be discussed.

CHAPTER 3

SOCIAL MEDIA AS A MARKETING CHANNEL

3.1 INTRODUCTION

The internet has transformed the lives of people, the way they work, the way they communicate and the way they live. A new kind of internet has emerged which is led by social media, online content and applications. In order to understand this new kind of internet, it is important to understand Web 2.0 (Akar & Topcu, 2011:38–39). This chapter starts with Web 1.0 and the transformation into Web 2.0 and the changes this brought about. Thereafter user-generated content, electronic word-of-mouth and social media will be evaluated. We will also look at social media marketing and how universities currently use social media in marketing are also examined.

3.2 WEB 2.0: BRINGING NEW POSSIBILITIES TO THE INTERNET

The beginning of the Web was known as Web 1.0, characterised by static pages that were grouped together into websites. The content of these websites was hard to change as technical skills were needed to do so (Cormode & Krishnamurthy, 2008). The Web evolved from Web 1.0 into a new platform called Web 2.0.

The Web 2.0 term was the outcome of a brainstorming session at a conference in 2004 between MediaLive International and O'Reilly. Web 2.0 has been defined as a second-generation web platform that places the user in control, which means users can actively collaborate and share amongst each other (Bosch, 2009:185; O'Reilly, 2005). The difference between the Web 2.0 platform and the rest of the Web as we know it lies in two features, namely user-generated content or micro-content and social media (Alexander & Levine, 2008:42). These two features will now be examined in more detail

3.2.1 USER-GENERATED CONTENT

User-generated content is a piece of information that transfers a key idea or thought. It is not created in the same manner as a static webpage but requires the user to simply select from menus, templates, upload or write a short piece (Alexander & Levine, 2008:42). User-generated content can also be generated from two activities. The first activity is when content is created by a user and uploaded to the internet. For example, a student takes photos of their university campus and uploads them to the university's Facebook page. The second activity is the communication or collaboration that goes along with the uploaded content, for example students making comments on the photo of the university uploaded onto Facebook (Mendes-Filho & Tan, 2009). So instead of internet users only receiving information on static web pages, they can now, with Web 2.0, create content.

User-generated content can come from either the consumer or the organisation. Weinberg and Pehlivan (2011:276) identify two types of user-generated content:

- *Media-generated content*: This type of content is created when marketers or organisations create content for use on social media sites. For example, the public relations department at a university runs a Twitter account on behalf of the university and tweets five times a day.
- *Consumer-generated content*: This type of content is the actual content created by a consumer by means of a tweet, post or video. For example, a student tweets about the university's new student recruitment campaign.

Consumer-generated content, in particular, on social media sites has become invaluable to millions of users (Agichtein *et al.*, 2008:184) as they seek authenticity and want to participate in the conversation, instead of just being on the receiving end of one-way communication (Scott, 2007:25). Users want to share their experiences of products and services through social media, which can generate electronic word-of-mouth with peers using these Web 2.0 platforms (Akar & Topcu, 2011:38). Consumers have never been more empowered, as they can now give their opinion straight to the company. They no longer simply trust the traditional marketing that companies create (Constantinides & Stagno, 2011:9). The downside of social media for companies is that they have to monitor

this very closely, as it can be positive or negative word-of-mouth. As soon as something is posted, it is there to be seen by thousands of consumers.

3.2.2 ELECTRONIC WORD-OF-MOUTH

Word-of-mouth marketing remains one of the most powerful marketing tools available to a company with 20 – 50% of all purchasing decisions resulting from it (Bughin, Doogan & Vetvik, 2009:2). It is said to be more than twice as effective as traditional marketing with reference to customer acquisition and lasting results (Barker, Barker, Bormann & Neher, 2013:91). Bughin *et al.* (2009:4) identify three forms of word-of-mouth:

- *Experiential word-of-mouth:* This form of word-of-mouth is used the most (50 – 80% of all word-of-mouth) and is as a result of direct experience with a product or service. It usually flows from an experience that differs from what was expected. For example, a student takes a course and the university does not have enough study material for all the students, which results in a negative experience.
- *Consequential word-of-mouth:* This form of word-of-mouth is generated as a result of a company's marketing campaigns. Marketing campaigns generate positive or negative word-of-mouth for a company. For example, a student is directly exposed to a marketing campaign that a university launched to attract new students and passes the message directly on to friends, family and other students.
- *Intentional word-of-mouth:* This form of word-of-mouth is when companies use celebrity endorsements to generate positive word-of-mouth. For example, a university gets a successful Springbok rugby player that is part of the alumni to market the university's sport qualifications.

Word-of-mouth marketing has been elevated to new heights with the rise of social media, as user-generated content provides customers with the opportunity to communicate their experiences with companies, products and services to not only thousands of other customers, but the company's competitors too (du Plessis, 2010:2; Mangold & Faulds, 2009:357). This electronic word-of-mouth is thus changing the landscape from one-to-one communication to one of one-to-many communication through product review posts, opinions voiced on social networks and even blogs dedicated to praise or punish companies (Bughin *et al.*, 2009:2).

With the huge amount of information available to customers, they become more suspicious of companies' traditional marketing and increasingly base their purchasing decisions independent of what the company tells them about their products or services (Bughin *et al.*, 2009:2). Social media makes it possible for consumers to get information from people they trust who have had experience with the companies, products and services (du Plessis, 2010:2). Consumers these days look for electronic word-of-mouth through websites, social media sites, discussion forums, news groups, reviews, emails, chat rooms, instant messaging, consumer rating websites and blogs for alternative information to get other consumers' perceptions (Clemons, 2009:48; Schindler & Bickart, 2005; Akar & Topcu, 2011:40). People would rather trust a free word-of-mouth recommendation from friends, family or other trusted sources than the expensive advertising that companies develop (Bughin *et al.*, 2009:2; Cheung, Lee & Thadani, 2009). In the next section social media is highlighted.

3.3 SOCIAL MEDIA

Human nature makes people social beings. Maslow's hierarchy of needs indicates socialisation as one of the needs of people. Social media is rooted in this age-old theory, by providing people with a platform on which they can be social.

The foundation of social media is in the word "social", which is derived from the Latin word *sociālis*, which means partner or comrade. It is thus one of our basic needs as humans to have partners to interact with or be social with. Interactions started as in-person meetings which turned into mail and letters, and with the help of technology then grew to the telephone, then email to today's social media (Barker *et al.*, 2013:5; Safko, 2010:4).

The second word forming the foundation of social media is "media". Media is the means by which content is conveyed; it is how people or businesses connect with others. This content can be conveyed in the form of any published content, be it the written word, a telephone conversation, radio, television, email, websites, photos, audio and many more (Safko, 2010:4). From this discussion, social media can be defined as "...a new set of tools that allows us to more efficiently connect and build relationships with our customers and prospects..." (Safko, 2010:5). The tools mentioned in the definition are used to have

conversations, share, comment, edit and create content in an online community (Safko, 2010:5; Safko & Brake, 2009:6). These conversations involve sharing the user-generated content between two to thousands of consumers. This content includes facts, opinions, experiences, personal beliefs and rumours using words, pictures, video and audio amongst participants (Xiang & Gretzel, 2010:180; Patricios, 2009:22; Safko & Brake, 2009:6). This means that consumers anywhere in the world can now build relationships with one another because of social media (Bolotaeva & Cata, 2011).

It is, however, important to mention that all forms of social media are different and that social media and social networks are not the same concept, although they are used interchangeably. The Web 2.0 platform, which was discussed earlier, enables social media to function. Social media organisations develop their own set of guidelines for applications and then create their own Web 2.0 platform to run on according to these guidelines (Weinberg & Pehlivan, 2011:276). From a technological viewpoint Weinberg and Pehlivan (2011:278) highlight that the platforms themselves differ, as do the rules of usage as well as the way in which they are used. Twitter and a blog are used as examples to explain these differences. Twitter posts only have enough space for 140 characters and can be made as many times as needed during a day, whereas blogs can be of an unlimited length but are usually only posted once a day. Companies need to embrace the fact that the marketing focus now falls on the online environment and that social media usage and knowledge are invaluable, especially to the younger target market which includes students. The importance of social media in consumers' daily lives can be seen by looking at the websites that they visit the most. In Table 3 on the next page, the most visited websites are reported on for January 2015, globally and in South Africa. As can be seen in Table 3, social media features prominently among the top 12 sites visited globally and in South Africa. The most visited site globally and in South Africa is Google.com; about 300 million people visit Google on a daily basis, making it the fourth most powerful brand in the world. Facebook, which is the second most visited site globally and third most visited site in South Africa, had 890 million daily active users on average in December 2014, 745 million of whom were mobile users. If Facebook were a country, it would be the third largest in the world, with more users than the United States population. Some 11.8 million of these users were South African users in 2014 (Facebook, 2015; Anon, 2014). YouTube is the third and fourth most visited site globally and in SA, respectively. Every minute 100

hours of video are uploaded onto YouTube and more than 6 billion hours of video are viewed each month (YouTube, 2015). This gives an indication of how important social media is in the lives of consumers.

Table 3: Top 12 most visited sites monthly (January 2015)

Rank	Globally	South Africa
1	Google.com	Google.com
2	Facebook	Google.co.za
3	YouTube	Facebook
4	Yahoo	YouTube
5	Baidu.com	Yahoo
6	Wikipedia	LinkedIn
7	Amazon	Amazon
8	Twitter	Gumtree
9	Taobao	Wikipedia
10	QQ.Com	Twitter
11	Google.co.in	FNB
12	Live.com	News24

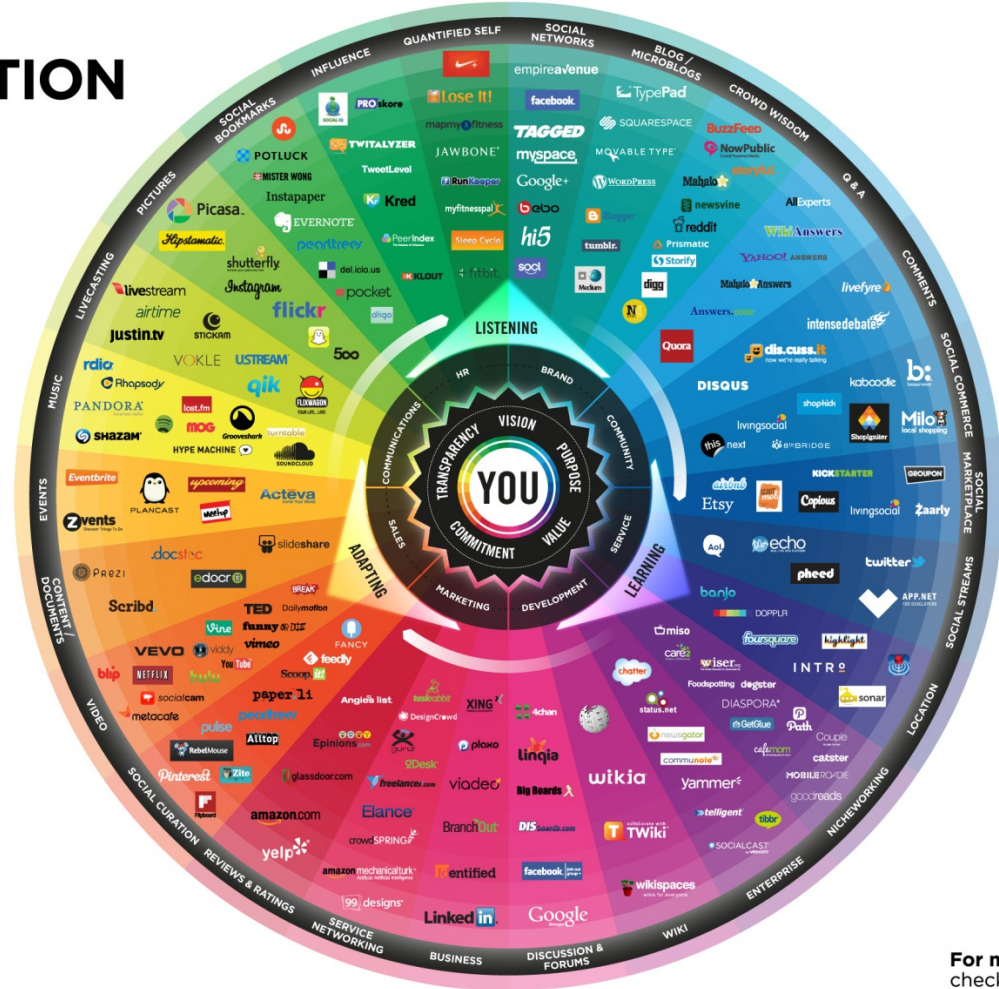
Source: Adapted from Alexa (2015).

Social media consists of hundreds of different platforms that can be divided into specific categories. All of these platforms can be seen in the conversation prism in Figure 3. The conversation prism is “a visual representation of the true expansiveness of the social web and the conversations that define it” (Solis, 2009). The conversation prism divides social media into 26 categories (Figure 3 on next page). The brand or company is at the inside of the conversation prism where they need to observe, listen or participate. It is all about building and promoting relationships with customers online which is defined by mutual value and benefits (Solis, 2009). As it is impossible to discuss and include all of the social media categories in this study, only a few will receive attention, i.e. wiki (Wikipedia), social networks (Facebook), business networking (LinkedIn), video (YouTube) and micro-blogging (Twitter) as these are the most popular categories globally and in South Africa.

These categories will be discussed in more detail in the next sections.

THE CONVERSATION PRISM

Brought to you by
Brian Solis & JESS3



For more information
check out conversationprism.com

Figure 3: The conversation prism

Source: Solis (2015).

3.3.1 SOCIAL NETWORKS

A social network is an online service that allows members to establish relationships and to share information about themselves and their interests with friends, professional colleagues and others by means of a public or private profile. A member will be able to update their profile with information such as interests, events, status, video, audio, links and photos. The primary reason for people becoming members of social networks is to connect with old friends and not to engage in discussion (Barker *et al.*, 2013:178–179; Safko & Brake, 2009:26). According to Barker *et al.* (2013:179), the first social networking site was that of Andrew Weinreich called Sixdegrees.com. It was launched as a result of the theory of “six degrees of separation” which claims that everyone in the world can be connected through a chain of connections that has no more than five intermediaries. Due to funding restraints it closed down in 2000. Today, according to the Alexa web rankings, Facebook is the most popular social network in South Africa and is the third most visited website (Alexa, 2015).

Facebook was founded in 2004 by Mark Zuckerberg as a social medium for students to get acquainted at Harvard. More than half of the student body registered with Facebook in less than a month. Dustin Moskovitz, Eduardo Saverin and Chris Hughes joined Zuckerberg to help promote the site. In March 2015 it had more than 900 million users, with roughly 9.4 million of these users being South Africans in 2014 (Facebook, 2015; World Wide Worx, 2014; Safko & Brake, 2009). In May 2012 Facebook was listed on the New York Stock Exchange.

3.3.2 WIKI

Publishing or media-sharing websites organise and share specific types of content. They can be divided into photo sharing, social bookmarking and publicly edited encyclopaedias. According to the Alexa web rankings, Wikipedia is the most popular publishing website in South Africa (Alexa, 2015).

Wikipedia was created in 2000 by Jimmy Wales through Nupedia, which was an “...extensive peer-reviewed, open content encyclopaedia.” The name Wikipedia came from

Larry Sanger who was the editor-in-chief. He suggested that wikis be used to create the encyclopaedia.

3.3.3 BUSINESS NETWORKING

Business networking is the same as a social network, but on a professional level. It provides people with the opportunity to network globally. According to the Alexa web rankings, LinkedIn is the most popular business network in South Africa. LinkedIn was created by Reid Hoffman, who was also the founder of PayPal, which he later sold to eBay. It is an online database for professionals that allows members to create a profile and network with other members from all over the world across all industries (Safko, 2010:32). LinkedIn had approximately 25 million members worldwide in 2012.

3.3.4 VIDEO

The video category refers to websites where users can upload and share videos online using mobile devices, blogs and email. YouTube was born when a group of friends wanted to share videos of a dinner party in San Francisco and struggled to use email as the clips were too big. Chad Meredith Hurley, Jawed Karim and Steve Chen created YouTube to solve this problem. They sold YouTube to Google in 2006 (Safko, 2010: 532).

3.3.5 MICROBLOGGING

Microblogging is a service that enables the member to send short updates of no more than 140 words to everyone who signed up to receive them (Gillin, 2007:192). Twitter is the most popular microblogging site. It was launched by Jack Dorsey, Evan Williams and Biz Stone in 2006 after it was first used as a research and development project by Obivious LLC (Safko, 2010: 539).

The way social media has changed how we have operated in the last 10 years is incredible. It is clear that this is not a fad, but something that is changing how we live. How marketing is done in social media is examined next.

3.4 SOCIAL MEDIA MARKETING

As will be seen in the discussion below, a new marketing channel emerged with the advent of social media which allows marketers to reach their target market in a different way. This change in the marketing landscape will now be discussed in more detail in the next section.

3.4.1 CHANGE IN THE MARKETING LANDSCAPE

Marketers traditionally used push marketing by distributing their marketing message to the customers. By doing this they attempted to position their product or service in such a way that consumers would want to buy it. For example, they bought television commercial slots and filled them with advertisements about the product or service. Push marketing is very expensive and takes a lot of effort in order to connect with only a small number of customers (Packer, 2011:4).

Along with technological development, especially the internet, customers started to search for products and services online, which is called pull marketing. For example, a potential student would search for universities using Google and the website of the university that had developed a proper online advertising campaign would be at the top of the search results. These search results would pull the potential students to the university's website where they could explore the courses and services offered (Packer, 2011:5).

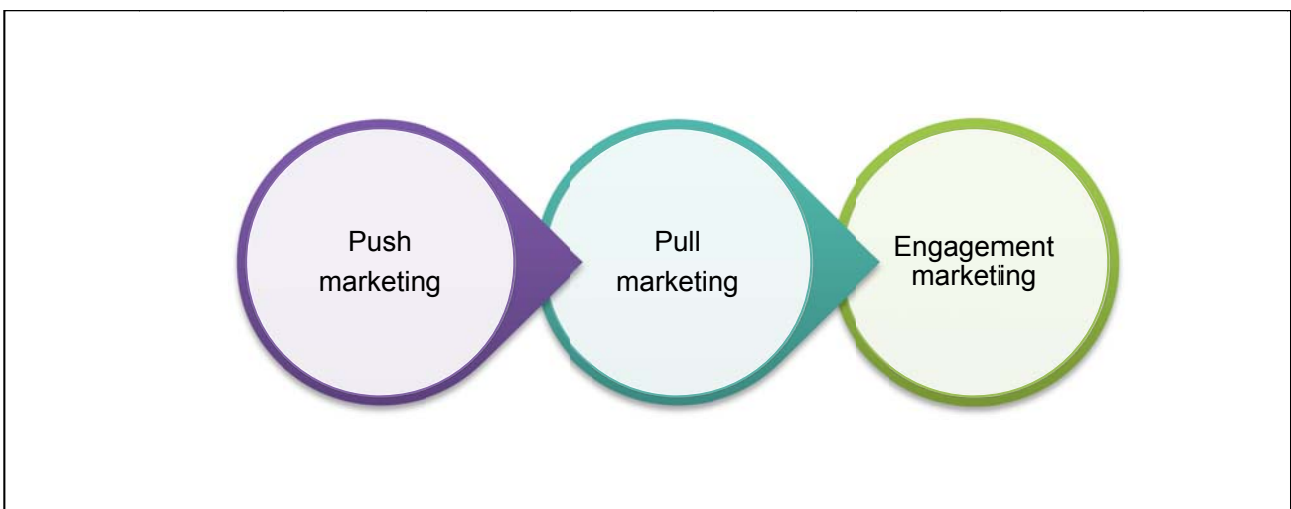


Figure 4: Evolution of marketing

3.4.2 ENGAGEMENT MARKETING

With social media came a new type of marketing, namely engagement marketing. This type of marketing requires companies to start an "...on-going, meaningful and productive conversation" (Packer, 2011:5) with their customers in the form of social media marketing. For example, a university uses social media platforms such as Twitter and YouTube to communicate with potential students. Social media marketing can be defined as positively influencing the target market towards a website, company, brand, product, service or person by making use of social media platforms (Barker *et al.*, 2013:3; du Plessis, 2010:4). Barker *et al.* (2013:3) emphasise three significant aspects relating to social media marketing:

- *Generating buzz:* The company needs to generate buzz by using social media platforms such as YouTube, Twitter, Blogger, Facebook etc. The message is spread through user-to-user contact and not through purchased advertisements or press releases.
- *Promotion through consumers:* Consumers themselves spread the message through social media platforms like Twitter and not the company itself.
- *Online conversations:* By doing the above companies encourage customers to start a conversation with one another, not with the company, as this form of marketing is not controlled by the company.

Social media is a new dimension that has been added to marketing. Taking the above discussion into consideration, it can be seen that the goal of social media marketing is to start a conversation with the customer. This three-way conversation takes place between customers; companies listen and then positively influence, but they are not directly part of the conversation, they are merely observing (Barker *et al.*, 2013:3).

Social media marketing focuses on contributions and building trust relationships as this type of marketing does not have an end date like traditional marketing, but rather it is an ongoing conversation. The company does not have control over what customers say and do in social media marketing, but it can ensure that it makes a positive contribution by building a trust relationship with customers (Barker, *et al.*, 2013:15). Constantinides and Fountain (2008:238) report on the power of social media marketing by providing examples

of serious defects in products that were mentioned on social media and were later spread through traditional channels. Examples are the Dell laptop recall and Kryptonite bicycle locks.

Organisations are throwing all the types of social media together into one category when starting with social media marketing, but it is important to note that different social media types have different purposes and consumers use and react to them differently (Weinberg & Pehlivan, 2011:278). Companies that are using social media successfully receive constant customer feedback, participate in continuing two-way relationship building and communication and understand the way an online customer operates (Patricios, 2009:23). This brings many positives to the organisation and puts them ahead of competitors. Patricios (2009:23) goes even further and highlights that companies that are using social media correctly are "...building a legacy of online marketing wisdom and growing databases that will catapult them ahead of brand owners exclusively clinging to traditional media". du Plessis (2010:4) points out some of the ways in which a company can use social media platforms in its social media marketing, see Table 4 on the next page.

Web 2.0 and social media have had a remarkable effect on the way in which companies conduct marketing. Companies need to be more creative than ever before to target their audience and make a profit (Bolotaeva & Cata, 2011). Social media holds a lot of potential for businesses if they take the time to carefully incorporate it into their existing marketing mix (Bolotaeva & Cata, 2011).

The next section deals with how social media is incorporated into universities' marketing.

3.4.3 SOCIAL MEDIA MARKETING AND UNIVERSITIES

South African universities do make use of social media platforms to an extent. Most universities provide a link on their website that directs the user to the different social media platforms being used. The following explains how they are being used:

Table 4: Social media marketing tools

Tool	Explanation	Use by organisation
Blogs	An individual provides commentary in the form of a personal diary about various topics of interest. Visitors to the blog may respond to messages (Stanyer, 2006).	Builds customer community Encourages customer conversation
Product blog	Similar to a blog, but messages are aimed at selling products or services. In many instances the blogger has entered into affiliate programmes or joint ventures with another organisation (Goodfellow & Graham, 2007).	Builds customer community Encourages customer conversation
Blog press room	A blog maintained by an individual or an organisation in which information is fed to the media by means of press releases, videos, photos and screen shots (Wyld, 2008).	Brand/product publicity
Review blog	An extension of a blog but promoting new products and services and providing opportunity for professional reflection and viewpoints (Schrecker, 2008).	Brand/product publicity
Message board	An electronic platform in the form of a forum where various messages about different topics can be posted (Maclaran & Catterall, 2002).	Builds customer community Encourages customer conversation
Podcast	A digital media file that can be downloaded from the internet by users and played back using various internet and communication technologies (Lu & Hsiao, 2009).	Builds customer community Encourages customer conversation
Vlog	The same as a blog, but the medium is a video where the message can be seen and heard by users (Lu & Hsiao, 2009).	Builds customer community Encourages customer conversation
Wiki	A web page or several web pages, the content of which can be modified by users who can access these pages (Mason, 2008).	Builds customer community Encourages customer conversation
Real Simple Syndication (RSS) feed	Users can be connected to internet content by subscribing to a feed (Luckhoff, 2009).	Attracts traffic to a website Leaves a content trail
Widget built into social media sites	An applet that can be built into an HTML web page to add content and to make it interactive (Dmochowska, 2008).	Builds customer community
Beacon	An advertisement system on Facebook. Data is sent from external websites to Facebook to allow targeted advertisements while users can share their activities with their friends (Facebook backs down, 2007).	Builds customer community Encourages customer conversation

Tool	Explanation	Use by organisation
Fan page	A page of a celebrity within a social media site such as Facebook or MySpace. Many organisations also create a fan page for a brand (Luckhoff, 2009).	Builds customer community Encourages customer conversation
Games, competitions, incentives	Providing entertainment to online community members while surfing the website (Sicilia & Palazón, 2008).	Attract traffic to a website Build customer community
Sponsoring of content category	Organisations are given a category in a suitable section of a social media site where they can post original content (Charton, 2007).	Brand/product publicity
Video advertisement	An engaging audiovisual advertisement that is generated by users and available on sites that are part of the Google content network (Li & Thomasch, 2008).	Builds customer community Encourages customer conversation
Online social media aggregator	A press release with multimedia features that can be accessed online (Standard Bank's online social media release, 2009).	Brand building
Hyper targeting	A website that allows for searches on social media and provides the marketer with the opportunity to read opinions of consumers about their products or services (Capper, 2008).	Brand/product publicity
Mobile platforms	Targeting individuals with tailor-made messages using available demographic and behavioural information (Milton, 2009).	Brand/product publicity

Source: du Plessis (2010:4).

- *Social networks:* It is interesting to note that universities use Facebook mostly as an information source for visitors. They post registration information, notices about events on campus and news articles, and market and highlight achievements of staff and students. On most Facebook pages users cannot interact or start a conversation, as they are controlled by the institution. Students and visitors can, however, comment, like or share the information.
- *Wikis:* Some universities do have a wiki. These are mostly an information page that shares the history of the institution.
- *Business networking:* Most universities also have profiles on LinkedIn with some information on the university.
- *Video:* Some universities make use of the YouTube channel with a variety of videos loaded from different sources. The videos range from marketing videos to interviews.
- *Microblogging:* Some universities also have a profile on Twitter which is linked to their websites and they actively engage on Twitter.

3.5 CONCLUSION

The development of Web 2.0 brought a whole dimension of new opportunities to organisations and consumers. With the use of user-generated content and social media, consumers are now more empowered than ever before. They look for authentic conversations online to provide them with information before they purchase a product, taking word-of-mouth into a new electronic format. This poses a challenge to companies to make sure that they build relationships with customers in such a way that they produce positive word-of-mouth.

There is a vast variety of social media platforms available to companies, which need to identify which ones will be most beneficial for them to use. It is not about taking part just because everyone is taking part, but the company should actually make a conscious effort to do so. This was one of the things that was noticed when considering the social media channels that universities currently use. Some of the tools have a link to the universities' websites, but the institutions are not actively engaged or do not even have a profile on the platform. They are thus creating an expectation and then not delivering on it. Social media is becoming an important influencer in the decision-making process. It is changing this

process in the purchasing behaviour of customers, as it is adding a factor that is beyond the control of the organisation (Constantinides & Fountain, 2008).

In the next chapter, decision making and the decision-making process students use to make a complex decision, such as choosing which university to attend, will be discussed. All the steps in this process will be evaluated from need arousal, the information gathering process, evaluation of alternatives, the decision and the implementation of the decision. Factors that influence their decisions will also be taken into account.

CHAPTER 4

CONSUMER DECISION-MAKING PROCESS

4.1 INTRODUCTION

With the increase of competition in the higher education market, it is necessary for universities to understand the choice and decision-making process of prospective students (Maringe, 2006:466). In this chapter the decision-making process and the different types of decision making will be discussed. The chapter will end with a discussion of complex decision making.

4.2 CONSUMER DECISION-MAKING PROCESS

Consumer decision making can be defined as “...a cognitive process; it consists of mental activities that determine what actions the consumer will undertake to remove a tension state caused by a need” (Brijball Paramasur & Roberts-Lombard, 2014:263). It consists of a set of steps that follow consecutively on one another. These steps in the consumer decision-making process can be seen in Figure 5 below. A brief overview of this process will then be discussed.

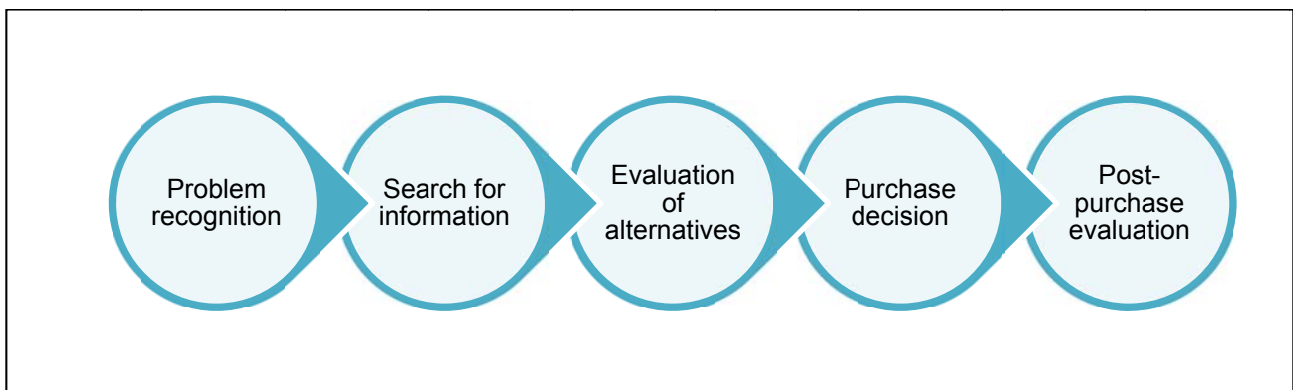


Figure 5: The consumer decision-making process

Source: Adapted from Brijball Paramasur and Roberts-Lombard (2014:266).

During step 1 of the consumer decision-making process, the consumer identifies or recognises the problem at hand. In step 2 the consumer conducts a search for information

on the problem that was identified in step 1. After the information search, the consumer will have alternatives from which to select. They will evaluate these alternatives against a set of criteria, after which they will decide to purchase or not to purchase. After the purchase the consumer will go through a post-purchase evaluation stage where they consider if they are happy with their purchase or not. This is just a very basic overview of the consumer decision-making process above. This process can either be very long and intense or happen within a matter of seconds, depending on the type of decision that needs to be made. These steps will be discussed in more detail later in this chapter. The following section will deal with the different types of consumer decision making.

4.3 TYPES OF CONSUMER DECISION MAKING

There are three types of decision making that can be considered, namely habitual decision making, limited decision making and complex decision making (Brijball Paramasur & Roberts-Lombard, 2014:270; Kotler & Fox, 1995:251). Before the types of decision making are discussed, it is necessary that purchase involvement be considered as it plays a significant role in the type of decision-making process a consumer will follow.

There are two types of purchase involvement, namely low involvement and high involvement. Some decisions consumers make without thinking about them, like buying bread, while other decisions involve a more thought-through process, for example buying a car. When consumers do not think too much about the purchase, like buying bread, it is a low involvement purchase. When more thought goes into the process of buying a product, like a car, it is a high involvement purchase. Thus the more involved consumers are in the decision-making process, the more complex it will be, as illustrated in Figure 6 below (Brijball Paramasur & Roberts-Lombard, 2014:270).

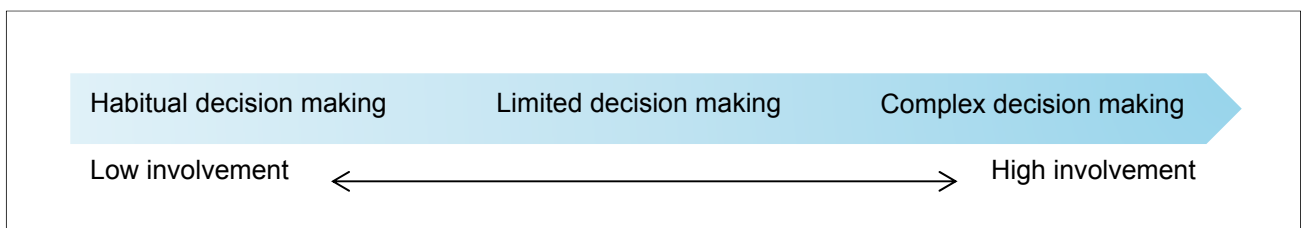


Figure 6: Involvement in decision making

Source: Adapted from Hawkins *et al.* (2001:505).

These three types of decision making will now be discussed in more detail.

4.3.1 HABITUAL DECISION MAKING

As can be seen in Figure 6 on the previous page, habitual decision making is characterised by purchases with low involvement which results in repeat buying behaviour (Brijball Paramasur & Roberts-Lombard, 2014:271). Brand loyalty plays a role in this type of decision making (Cant, 2010:143). Thus, consumers will start to buy a certain type of product out of habit as they are happy with the brand they are using. For example, a consumer will buy Albany bread and not even look at the other brands.

4.3.2 LIMITED DECISION MAKING

Consumers might become bored with the product they are currently using and consider an alternative, but the alternative's features are similar to the product they are currently using. High involvement in the decision is not merited (Hawkins *et al.*, 2010:506–507). From Figure 6 on the previous page, it is clear that limited decision making falls between low and high involvement. This is due to the fact that consumers are mostly not too involved with the alternatives of the product they want to purchase (Brijball Paramasur & Roberts-Lombard, 2014:272). An example is buying deodorant or floor cleaner.

4.3.3 COMPLEX DECISION MAKING

Complex decision making is the type of decision making where the consumer is the most involved in the process. The purchase entails that the consumer goes through each step of the decision-making process slowly (Brijball Paramasur & Roberts-Lombard, 2014:272). The consumer will do intensive research of internal and external information sources and will evaluate multiple alternatives (Hawkins *et al.*, 2010:507). According to Brijball Paramasur and Roberts-Lombard (2014:272), complex decision making usually occurs when conscious planning occurs in the purchase of:

- durable products;
- expensive products;
- a very important product;

- a product where a similar situation resulted in disappointment; and
- a product that the consumer does not have a lot of experience with or lacks information about and is scared that they will make the incorrect decision.

Kotler and Fox (1995:251) adapted the decision-making process and developed a more complex model aimed specifically at decisions involving the selection of a higher education institution. The model accommodates the factors that contribute to the complexity of choosing a university, as can be seen in Figure 7 below.

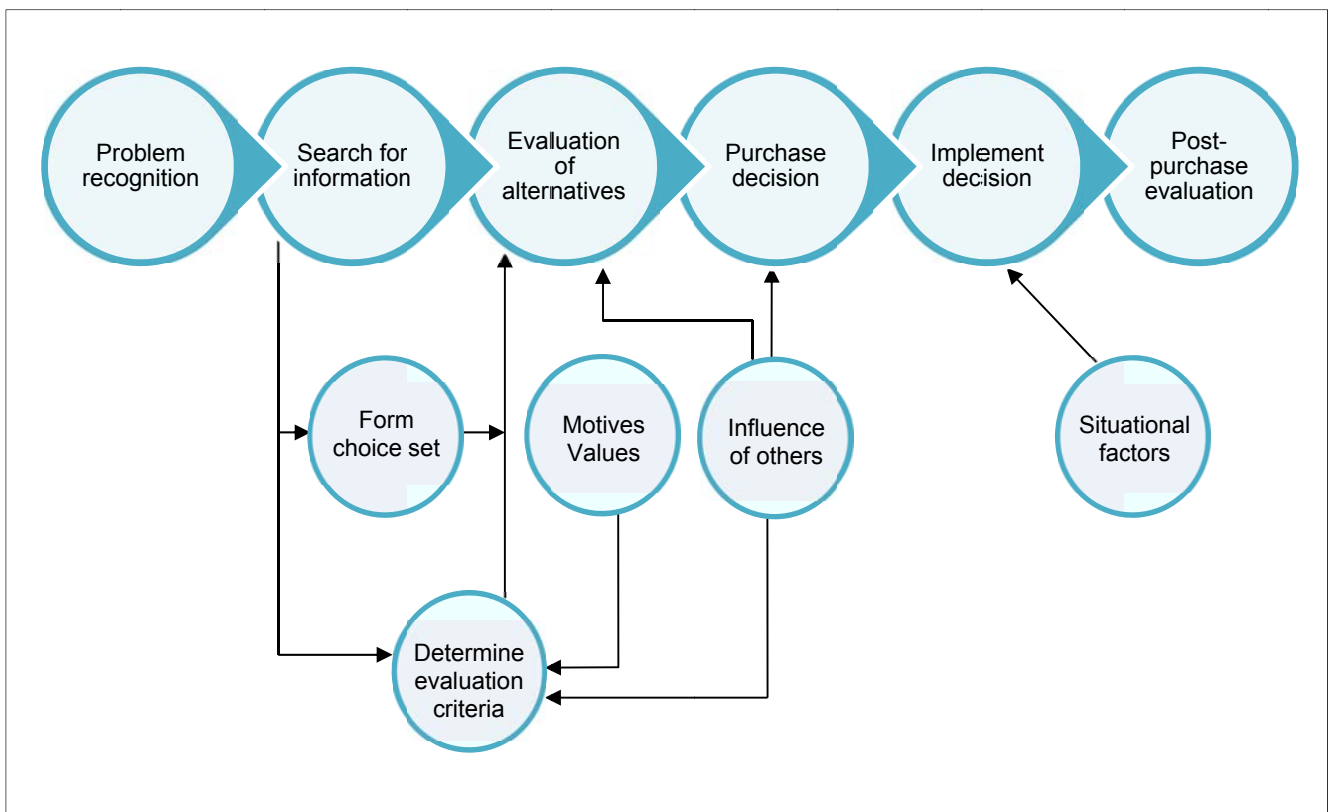


Figure 7: Steps in highly complex decision making

Source: Adapted from Kotler and Fox (1995:251).

4.3.3.1 Step 1: Problem recognition

During the problem recognition or need arousal step a consumer becomes aware of a gap between the actual state and the ideal state. This gap is the need that the consumer wants satisfied (Brijball Paramasur & Roberts-Lombard, 2014:266). The creation of a need activates the decision-making process (Hawkins *et al.*, 2001:508). The actual state refers to the consumer’s perception of their current position and the ideal state is the position where the consumer would ultimately like to be (Moogan, Baron & Bainbridge, 2001:180).

High school students are faced with the question of what they intend to do after school, be it continuing their education at tertiary level, taking a gap year or starting to work. This creates a gap between their actual state of being in school and their ideal state of their plans for the future. For a high school student to reach the ideal state of attending a tertiary institution, they need to have the intention to continue with education beyond high school level (Cabrera & La Nasa, 2000:7). The bigger the gap between this actual state and the ideal state, the more likely a student will act on this need (Moogan *et al.*, 2001:180).

The internal stimulus such as an intention to continue with tertiary education is not the only factor that can create a gap. External stimuli such as marketing efforts and word-of-mouth can also create a need for further education. It is thus very important for universities to make use of this opportunity to foster positive attitudes and build a passive presence in the minds of potential students with strategic marketing communication (refer to Chapters 2 and 3) (Maringe, 2006:468).

During the problem recognition step, a set of questions is generated in the applicant's mind that stimulates the need for more information (Brown, Varley & Pal, 2009).

4.3.3.2 Step 2: Search for information

Once the need to attend a university is recognised, the potential student will begin to gather and identify internal and external information necessary to satisfy the need (Cabrera & La Nasa, 2000:9). Potential students will start collecting internal information (from memory), but as most potential students have no previous experience in higher education, they will revert to external information, which will be discussed later in this section (Moogan *et al.*, 2001:180). Students only become aware of a few brands during their information search, known as the consideration set, as can be seen in Figure 8 on the next page. Only brands in this set will be evaluated further to later form the choice set from which the student will select the university they would like to attend (Boshoff & du Plessis, 2009:64).

If a South African student is taken as an example, he/she has 23 universities to choose from. This is known as the total set. The total set of universities is grouped into an awareness set as well as an unawareness set (Kotler & Fox, 1995:251). The student will only be able to make a decision of a university that is in his/her awareness set (Kotler & Fox, 1995:249). During this stage the potential student would also establish certain selection criteria/factors that are important to him/her in the choice of university. At each of these sets different types of information gathering will take place from different sources.

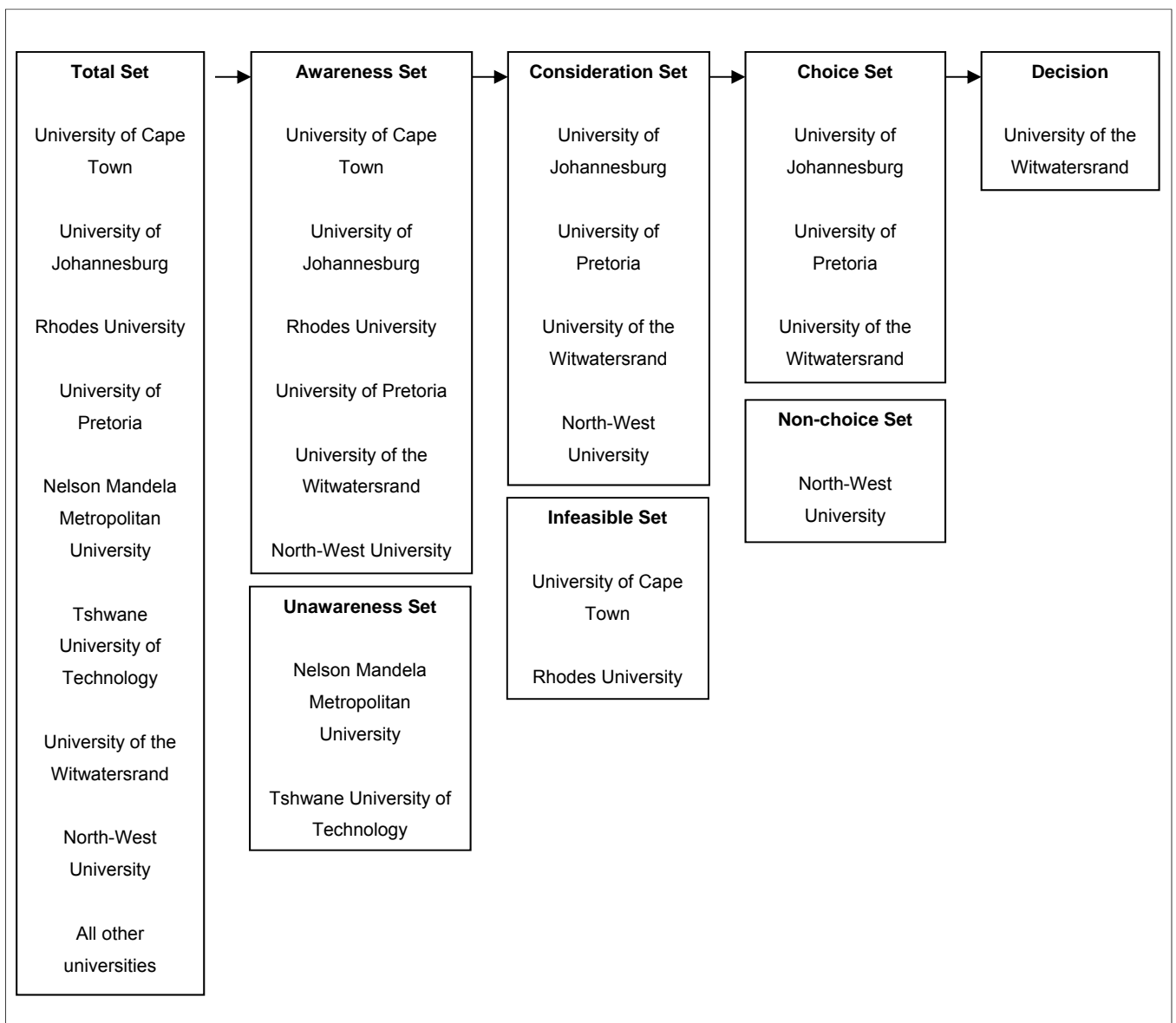


Figure 8: Sets in decision making
Source: Adapted from Kotler and Fox (1995:252).

There are numerous people that can influence the choice of university as the prospective student will turn to different people and sources for information and each will have an influence. During this phase students will also gather information on what will form the evaluation criteria, which will be used during the next step to evaluate the alternatives identified. Kotler and Fox (1995:252) name two factors that are important in the information-gathering step, namely information neediness and information sources which will now be discussed in more detail.

- **Information neediness**

Information neediness refers to the amount of information that students are likely to collect before making the decision (Kotler & Fox, 1995:252). As was discussed in Section 4.3 earlier, the amount of information needed depends on the type of buying decision involved and ranges from habitual decision making, i.e. buying a low involvement product such as bread, to complex decision making. The most complex type of decision for a consumer is extensive decision making and it is linked with very high involvement, as it is an unfamiliar, expensive or infrequent product or service that is being purchased (Lamb, Hair, McDaniel, Boshoff, Terblanche, 2006:79). The more important, personal and relevant a decision is to a person, the more carefully he/she will review information and consider the implication of the decision. This is known as the level of involvement (Kardes, Cronley & Cline, 2011:166). Thus for more complex decisions the level of involvement will be much higher than when a decision is not that important.

As mentioned earlier, the potential students collect internal and external information when making a decision, but will most likely revert to external information sources due to the following factors (Boshoff & du Plessis, 2009:64):

- *Perceived risk*: The decision of a university is considered as one of the most important decisions that a person will make in their life. It is usually a once-off purchase which will most likely affect a student's life for the next three to five years, as well as the career that they end up choosing (Dunnett, Moorhouse, Walsh & Barry, 2012:3; Kotler & Fox, 1995:24). The importance of this decision, together with the cost of tertiary education, makes it a high-risk purchase. In order to reduce the risk of the purchase and make customers feel more at ease about their choice, they collect

information about the service (Zeithaml *et al.*, 2006:55). This means that a student will not find enough information internally, but will need to turn to external information sources for more information.

- *Knowledge level of the buyer and prior experience:* When a decision is classified as complex, it usually involves an unfamiliar and infrequent product. As was mentioned in the bullet above, the choice of university is usually a once-off purchase and it will be the first time that a potential student makes this type of purchase. When first starting to collect information about different universities, the student is ill informed with no prior experience. This will lead the student to a lengthy external information search in order to collect enough information to make an informed decision.
- *Level of interest in the service:* A student choosing to study further will spend more time searching for information on universities in various sources, because it is something that they are interested in. They will not have enough internal information to make a decision and will thus consult external information sources.

Taking the above discussion into consideration, with a complex decision like choosing a university, students will most likely gather information by means of an external search.

- **Types of information sources**

Information sources are sources that students will consult and that will most likely influence them when making a decision. As was mentioned above, students will first turn to information stored as memories from past learning experiences. This is done to determine if the solution to their need is not already known (Brijball Paramasur & Roberts-Lombard, 2014:268; Hawkins *et al.*, 2001:528). This is known as an internal information source.

From the above discussion, it was, however, determined that in choosing a university, students will gather information using an external search. Potential students gather information on possible universities to attend from different sources (Veloutsou, Paton & Lewis, 2005:281). Ihlanfeldt (In: Kotler and Fox, 1995:251) identified sources of information that influence the potential student. These can be seen in Figure 9 on the next page, the solid lines indicate direct influence and dashed lines indirect influence.

Various researchers built on this during the years by looking at information sources that influence this decision (Simões & Soares, 2010:379; Brown *et al.*, 2009:317; Bonnema &

van der Waldt, 2008:319; Briggs & Wilson, 2007:63; Veloutsou *et al.*, 2005:281; Hoyt & Brown, 2003:8; Moogan *et al.*, 1999:219; Chapman, 1986:500) and the usefulness of these information sources (Wiese, van Heerden, *et al.*, 2009:39) which can be seen in Table 5 on the next page.

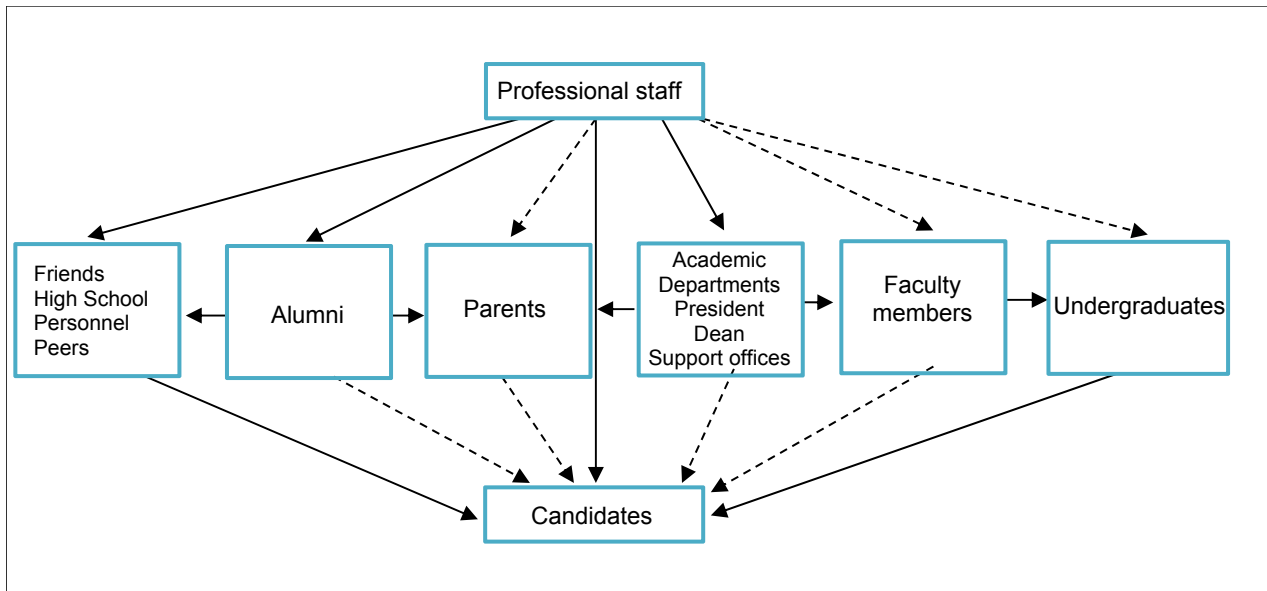


Figure 9: Steps in highly complex decision making
Source: Kotler and Fox (1995:251).

Zeithaml *et al.* (2006:55) distinguishes between personal and non-personal sources that consumers use to gather information (external information sources). During the literature review sources of information were identified from previous research studies, which will now be discussed according to this classification.

Non-personal sources are sources of information that come directly from the university, such as advertisements, prospectuses, brochures, leaflets, open days, campus visits, videos and websites. Websites were found to be the most influential source of information in a number of studies (Simões & Soares, 2010:379; Brown *et al.*, 2009:317; Hoyt & Brown, 2003:8) and were also considered as being one of the top five used sources in other studies conducted (Wiese, van Heerden, *et al.*, 2009:54; Briggs & Wilson, 2007:63; Veloutsou *et al.*, 2005:286). The university prospectus was also found to be used the most as a source of information in studies conducted by Veloutsou *et al.* (2005:286), Briggs and Wilson (2007:63) and Wiese, van Heerden *et al.* (2009:54). Other studies found university prospectuses and other printed university publications among the top five used sources of information (Simões & Soares, 2010:379; Brown *et al.*, 2009:317; Hoyt & Brown, 2003:8).

Table 5: Information sources used in university choice

INFORMATION SOURCES	International						National		
	Moogan & Baron (2003).	Moogan, Baron & Harris (2003).	Hoyt & Brown (2003).	Veloutsou, Paton & Lewis (2005).	Briggs & Wilson (2007).	Brown, Varley & Pal (2009).	Simões & Soares (2010).	Bonnema & van der Waldt (2008).	Wiese (2008).
Advertisements on billboards								x	
Advertisements in magazines/newspapers			x		x			x	x
Advertisements on radio			x					x	x
Advertisements on television			x					x	x
Alumni							x	x	x
Career advisors	x	x		x	x				
Career assessments					x			x	
Career convention	x				x			x	
Campus visits			x				x		x
Events on campus			x				x		x
Family members (not parents)				x				x	
Friends	x	x		x	x			x	
High school counsellors							x		
High school teachers	x	x		x		x	x	x	x
Lecturers on campus				x					
Library materials	x		x						
News				x					
Open days		x		x	x	x		x	x
Parents	x	x		x				x	x
Personal contact			x						
Publicity							x		
Students at the university				x			x	x	
University league tables				x	x	x			
University publications	x	x	x	x	x	x	x	x	x
University school visits			x	x			x		x
University website			x	x	x	x	x	x	x
Word-of-mouth		x			x				

The previous studies conducted further found that campus visits or open days were also considered in the top five as information sources that are important when selecting a university (Simões & Soares, 2010:379; Wiese, van Heerden, *et al.*, 2009:54; Brown *et al.*, 2009:317; Bonnema & van der Waladt, 2008:319; Briggs & Wilson, 2007:63; Veloutsou *et al.*, 2005:281; Hoyt & Brown, 2003:8; Moogan *et al.*, 1999:219).

Personal sources of information include friends and family, parents, counsellors, other students, teachers and university admission officers. The previous studies conducted further found that word-of-mouth was also considered as a top five information source that is important when selecting a university (Simões & Soares, 2010:379; Wiese, van Heerden, *et al.*, 2009:54; Brown *et al.*, 2009:317; Bonnema & van der Waladt, 2008:319; Briggs & Wilson, 2007:63; Veloutsou *et al.*, 2005:281; Hoyt & Brown, 2003:8; Moogan *et al.*, 1999:219). Bonnema and van der Waladt (2008:318) found that different subgroups consult different sources of information when gathering information on universities and that word-of-mouth or direct sources from the university, also known as social sources, are sometimes favoured above advertising or media sources. Zeithaml *et al.* (2006:55) state that consumers that are purchasing a service prefer consulting personal sources because they then receive information about the experience vividly. Most service providers do not have the funds or skills to advertise and the service attributes cannot be assessed, increasing the risk to select a little-known alternative. This is supported by previous research conducted by O'Connor and Lundstrom (2011:352) on information-seeking behaviour of students which revealed that students, like other consumers, prefer informal, personal forms of information and that they prefer searching for information on the internet.

- **Influence of information sources**

As was discussed in Chapter 2, companies need to make sure they understand how consumers are finding and evaluating information. Nunes and Bellin (2012) support this by stating that “companies should be aware of where customers are currently getting their information, and determine the extent to which each source of influence motivates their customers to make a purchase or, on the other hand, how it might be a demotivator”. They compiled a chart, shown in Table 6 on the next page, to indicate the new sources of buyer influence that can influence consumers (Nunes & Bellin, 2012).

Table 6: Sources of consumer influence

		Personalised information	Non-personalised information
	Personal source	Tailored recommendations Influence factor: Trust Family and friends Personal physicians Travel agents	Published professionals Influence factor: Credibility Journalists Film critics Cookbook authors
Internet	Third-party source	Concierge services Influence factor: Quality Red Butler Brokerage firm JustFabulous	Institutional reports Influence factor: Reliability Consumer Reports Web MD Lonely planet
	Company source	Relationship marketing Influence factor: Personal knowledge Targeted promotions Personalised websites Customised experiences	Broadcast marketing Influence factor: Visibility Direct mail Television advertising Press mentions
New media	Crowd source	Social networks Influence factor: Interactivity Facebook Twitter Pinterest	Opinion aggregators Influence factor: Consensus Yelp Tripadvisor Wikipedia
	Automated source	Recommendation engines Influence factor: Objectivity Amazon.com Netflix Pandora	Price comparison services Influence factor: Comprehensiveness Kelkoo Bizrate Priceline

Source: Nunes and Bellin (2012).

The marketing department of the company should have a set of actions for each source of buyer influence. There are four options that marketers could use in new consumer influence (Nunes & Bellin, 2012):

- *Engage:* This option should be selected if an investigation specifies that this source of influence motivates customers and the organisation has the ability and resources to direct and guide customers by making use of this source. The organisations should thus continue using it.
- *Redeploy:* This is a viable option if a company identified a source as wasted effort, meaning that it can reach customers but the source does not influence their decision.

- *Learn*: A company can choose to learn by observation when a source used does not have the ability to successfully deliver the message to customers but it can successfully influence them.
- *Monitor*: When a company does not have enough knowledge about how to influence a particular source or it makes a decision that it does not want to be heard by a certain source, it is better to stay out. It does not mean that it should be absent, as it can monitor from outside.

There are numerous sources that can influence the choice of university as the prospective student will turn to different people and sources for information and each will have a different influence. None of the studies mentioned above included social media or the role of social media in the student's decision in choosing a university to attend. Taking the above discussion into consideration as well as the discussion earlier about the popularity of social media and electronic word-of-mouth, it is evident that information gathered from the use of social media can play a role in the decision about which university to attend. The sources of information discussed in this section, as well as choice factors, which will be discussed in the next section, are significant in information-seeking behaviour (Simões & Soares, 2010:375).

4.3.3.3 Step 3: Evaluation of alternatives

During the information-gathering phase the student identified alternatives. These alternatives are evaluated during the third step of the consumer decision-making process. Students will assign a level of significance to each alternative and will use a set of evaluation criteria to evaluate the alternatives, which can be affected by individual and environmental differences (Brijball Paramasur & Roberts-Lombard, 2014:273; Moogan *et al.*, 2001:180). The evaluation criteria are formed from the information gathered in the previous step. These are the factors that students use in choosing a university. Various studies have been conducted on the factors that students consider before choosing a university both internationally and nationally. Wiese (2008:156) compiled a table of choice factors that students use as identified in previous research. Table 7 on the next page is an adapted version of this table to include Wiese's findings (2008) as well. When evaluating the alternatives, the potential student will take the choice factors, evaluate all the

universities against these criteria and select only a few to go forward with. The awareness set can further be divided into a consideration set and an infeasible set. The consideration set will be the universities that the student will further consider and the infeasible set is the universities to which the student cannot apply as they do not qualify. A non-choice set will be formed that includes universities that do not fit further into the criteria of the student, for example distance. The choice set is then complete (see Figure 8 on page 51). The university the student decides on will come from this choice set (Kotler & Fox, 1995:251–252).

Table 7: Choice factors evaluative criteria

CHOICE FACTORS EVALUATIVE CRITERIA	Van Dimitrios (1980)	CIRP (Cooperative Institutional Research Programme)	ASQ Plus (Admitted Student Questionnaire)	ASQ (Administrative Student Questionnaire)	Bajash and Hoyt (2001)	Cosser and Du Toit (2002)	Coetsee and Liebenberg (2004)	Holtzhausen (2005)	Wiese (2008)
Wide choice of subjects/courses		x	x	x				x	x
Quality of teaching				x	x	x		x	x
Academic facilities			x	x					x
Entry requirements				x					x
Fees		x	x	x		x	x	x	x
Location	x	x	x	x	x	x	x	x	x
Sport programme	x		x	x	x	x	x		x
Social life		x	x	x	x				x
Attractiveness of campus			x	x					x
Safety & security									x
Tradition		x				x	x		
Immediate family went there						x	x		x
Friends						x	x		x
Academic reputation		x	x	x		x	x	x	x
Financial assistance		x				x		x	x
Language policy									x
Links with industry									x
Multicultural/diversity				x				x	x
Internationally linked								x	x
Employment prospects		x			x				x
Flexible study mode						x	x		x
Image							x	x	x

CHOICE FACTORS EVALUATIVE CRITERIA	Van Dimitrios (1980)	CIRP (Cooperative Institutional Research Programme)	ASQ Plus (Admitted Student Questionnaire)	ASQ (Administrative Student Questionnaire)	Bajash and Hoyt (2001)	Cosser and Du Toit (2002)	Coetsee and Liebenberg (2004)	Holtzhausen (2005)	Wiese (2008)
Size		X			X				
Religion		X		X				X	
Personal attention			X						
On-campus housing			X	X		X	X		X
Access to off-campus facilities			X			X			
Research					X				

Source: Adapted from Wiese (2009).

The purchase decision step will now be discussed.

4.3.3.4 Step 4: Purchase decision

The fourth phase of the consumer decision-making process is the outcome of the evaluation of alternatives where the student makes their decision. The alternative that is selected is the one that is closest to the criteria used to evaluate it (Brijball Paramasur & Roberts-Lombard, 2014:274; Cant, 2010:53). Several factors can still interfere with a potential student's choice of university after going through this whole process (Brown *et al.*, 2009:315). It is important to highlight that a decision would not be possible without information.

4.3.3.5 Step 5: Post-purchase evaluation

During the last phase of the consumer decision-making process the student evaluates the decision made. This phase is not relevant to this study, as most students will often only go through this phase close to or after graduation. This is where the university degree will fulfil their expectations or leave the student/graduate dissatisfied (Cant, 2010:53).

4.4 CONCLUSION

The consumer decision-making process and how this process differs for the different types of decisions that consumers need to make were considered in this chapter. The complex decision-making process was discussed in detail by examining each of the steps. Universities need to understand the factors as well as the decision-making process that students will go through when selecting a university in order to provide relevant information to them. From the literature it is clear that students will most likely conduct an external information search and that information provided by sources close to them can possibly influence their decision.

CHAPTER 5

RESEARCH METHODOLOGY

5.1 INTRODUCTION

This chapter will focus on the design of methodology in research. The research process and all of the steps will be discussed in detail based on the research process as set out by Tustin, Lighthelm, Martin and van Wyk (2005:76). The specific research design and methodology of this study will also be described.

5.2 THE RESEARCH PROCESS

Organisations are often faced with challenges that result from changes in their environment (Hair, Bush & Ortinau, 2006:46). Marketing research is then used to find solutions to these challenges that they encounter to make an informed decision. It is also possible that opportunities can be discovered when conducting marketing research (McDaniel & Gates, 2010:4). Marketing research can be defined as "...the systematic and objective identification, collection, analysis, dissemination and use of information for the purpose of improving decision making related to the identification and solution of problems and opportunities in marketing..." (Malhotra, 2010:39).

In order to conduct marketing research, a process needs to be followed to find solutions to the problems identified. This research process is identified as one of the most significant parts in a research study. It is important that a structured approach be followed when conducting research, as poor planning can result in time, money and resources being wasted without getting the desired result (Hair *et al.*, 2006:55).

For the purpose of this study the steps in the structured research process were followed as set out by Tustin *et al.* (2005:76) and can be seen in Figure 10 on the next page.

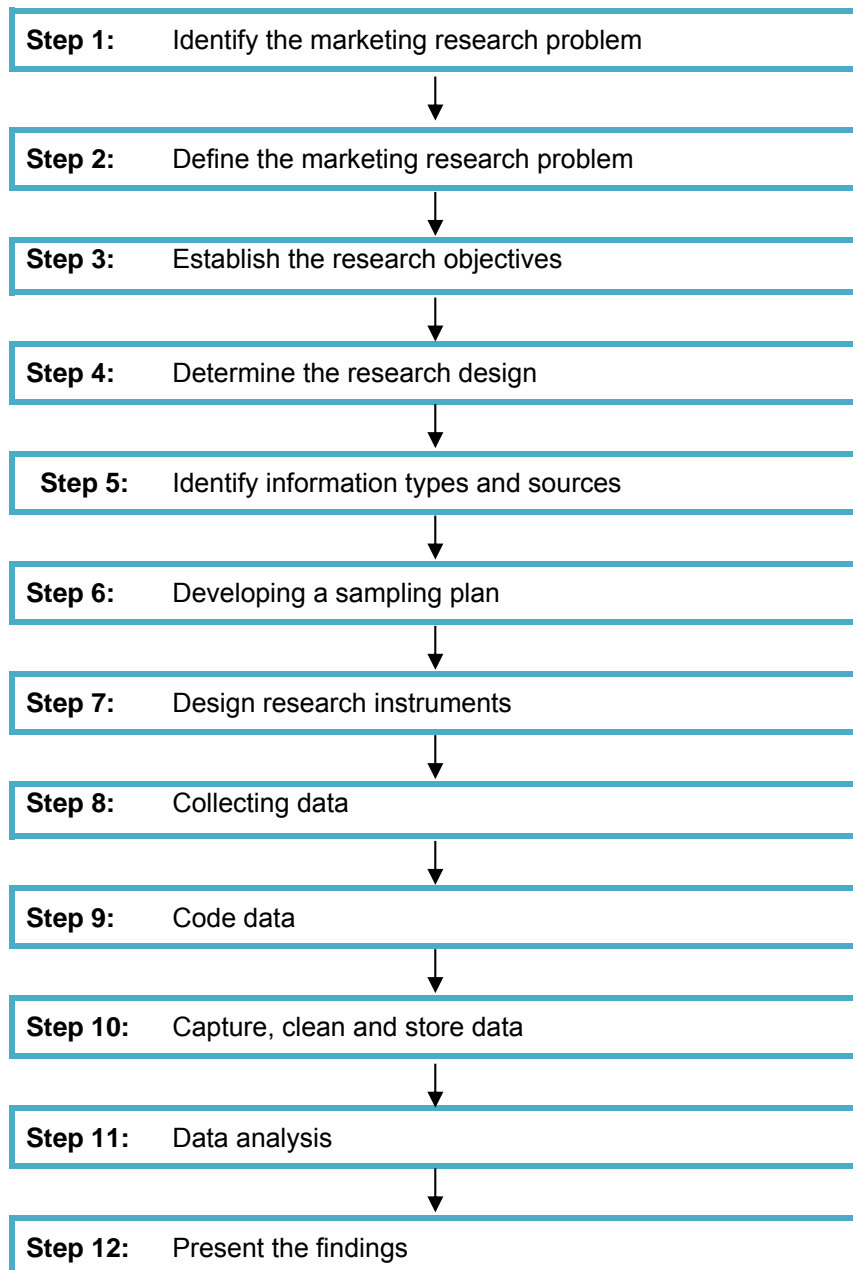


Figure 10: The research process
Source: Adapted from Tustin *et al.* (2005:76).

Taking the above 12 steps into consideration, the rest of the chapter will be structured according to this research process. Each of the steps will now be discussed in more detail.

5.2.1 STEP 1: IDENTIFY THE MARKETING RESEARCH PROBLEM

Before any research can be conducted a research problem needs to be identified. Without the identification of a research problem it is not possible for the research exercise to take place. Students use various sources of information to make a decision on where they would like to study. Broadly, the need for this research study developed due to the advent of social media as a new source of information. It was decided to determine if social media is one of these information sources that students consult when making their decision on a university to attend. In step 2 the research problem needs to be defined properly.

5.2.2 STEP 2: DEFINE THE MARKETING RESEARCH PROBLEM

After the research problem is identified, the next step is to define it. Clear problem definition is the most important step in the marketing research process, as it is used as a basis to develop an appropriate research approach (Wiid & Diggins, 2013:42; Malhotra, 2010:69).

In the previous three chapters (Chapters 2 – 4) the literature that supports the research problem was reviewed. In Chapter 2 the history of the higher education landscape of South Africa was discussed. It was noted that during 2000 – 2005 there were various changes that took place in this industry which resulted in the entire higher education landscape changing. Changes were identified that impacted universities' marketing communication, the most important being the changes to the government funding structure, the changing profile of students (Generation Y) and the increasing importance and use of technology by students. In Chapter 3 social media marketing and the fact that more people are using and relying on social media as a marketing channel were examined. In Chapter 4 the decision-making process and the sources of information that students currently use to look for information on which universities to attend was covered. From the literature reviewed on databases like EBSCO, ProQuest Central, JSTOR and Springerlink it was identified that student decisions have been influenced mainly by traditional media in the past. However, no research has been done on what role social media as an information source plays in the decision-making process of students in university choice in South Africa. This was identified as a gap in the knowledge.

The following research question was asked: *Do students use social media as an information source when choosing a university to attend?* The research objectives were based on this question.

5.2.3 STEP 3: ESTABLISH THE RESEARCH OBJECTIVES

After the problem has been clearly defined, the next step in the research process entails setting research objectives. The objectives for a research study indicate what data is needed to solve the research problem that was identified and defined in steps 1 and 2 (Wiid & Diggines, 2013:48; Tustin *et al.*, 2005:81). The research objectives set should be as clear, accurate, relevant and specific as possible in order to ensure that they will not be misinterpreted (Wiid & Diggines, 2013:48; Tustin *et al.*, 2005:81). Primary and secondary objectives are usually set in marketing research. The primary objective provides the complete overall aim of the research, whereas secondary objectives focus on the specific aspects that need to be examined (Wiid & Diggines, 2013:48).

The primary research objective of this study was to determine the role of social media, as an information source, on the decision-making process of students when selecting a university to attend. This primary objective was supported by the following secondary objectives:

- To determine the sources of information that students consult in university choice
- To investigate the usefulness of information sources that students consult in university choice
- To determine the credibility of social media as an information source
- To determine which specific social media platforms are the most popular amongst students
- To investigate if social media has an influence on the student decision-making process in university choice
- To determine if students in different age groups differ in their use of social media
- To determine how much time students spend on social media

After the research objectives were formalised and recorded, the research design was formulated.

5.2.4 STEP 4: DETERMINE THE RESEARCH DESIGN

Research design is defined as a framework that is used to conduct marketing research. It contains the detailed procedure that will be used to select sources to acquire the information needed in order to solve the problem that was defined at the beginning of the research process (Malhotra, 2010:102; Cooper & Schindler, 2006:138). Effective and efficient research is ensured when a solid research design foundation has been laid (Malhotra, 2010:102). There is, however, no research design that can be classified as being the perfect design; in fact, almost every research study that is conducted will be different. A balance needs to be achieved between the elements in research design, such as the objectives that have been set, the resources available for the research and the time available (Tustin *et al.*, 2005:82). Research designs are classified into three categories, namely exploratory research, causal research and descriptive research as can be seen in Figure 11 on the next page (Burns & Bush, 2000:75).

Each of these research design types will now be explained in detail.

5.2.4.1 EXPLORATORY RESEARCH

Exploratory research is used to define the problem at hand more specifically, to identify possible courses of action or to gain more information (Malhotra, 2010:103). Tustin *et al.* (2005:85) point out that the use of exploratory research can help to establish research priorities and highlight the possible problems that can be encountered in conducting the research. It is suggested that the findings of exploratory research be considered as the starting point for future research. This method is usually followed by either more exploratory research or by descriptive research (Malhotra, 2010:103). Causal research is the second type of research design.

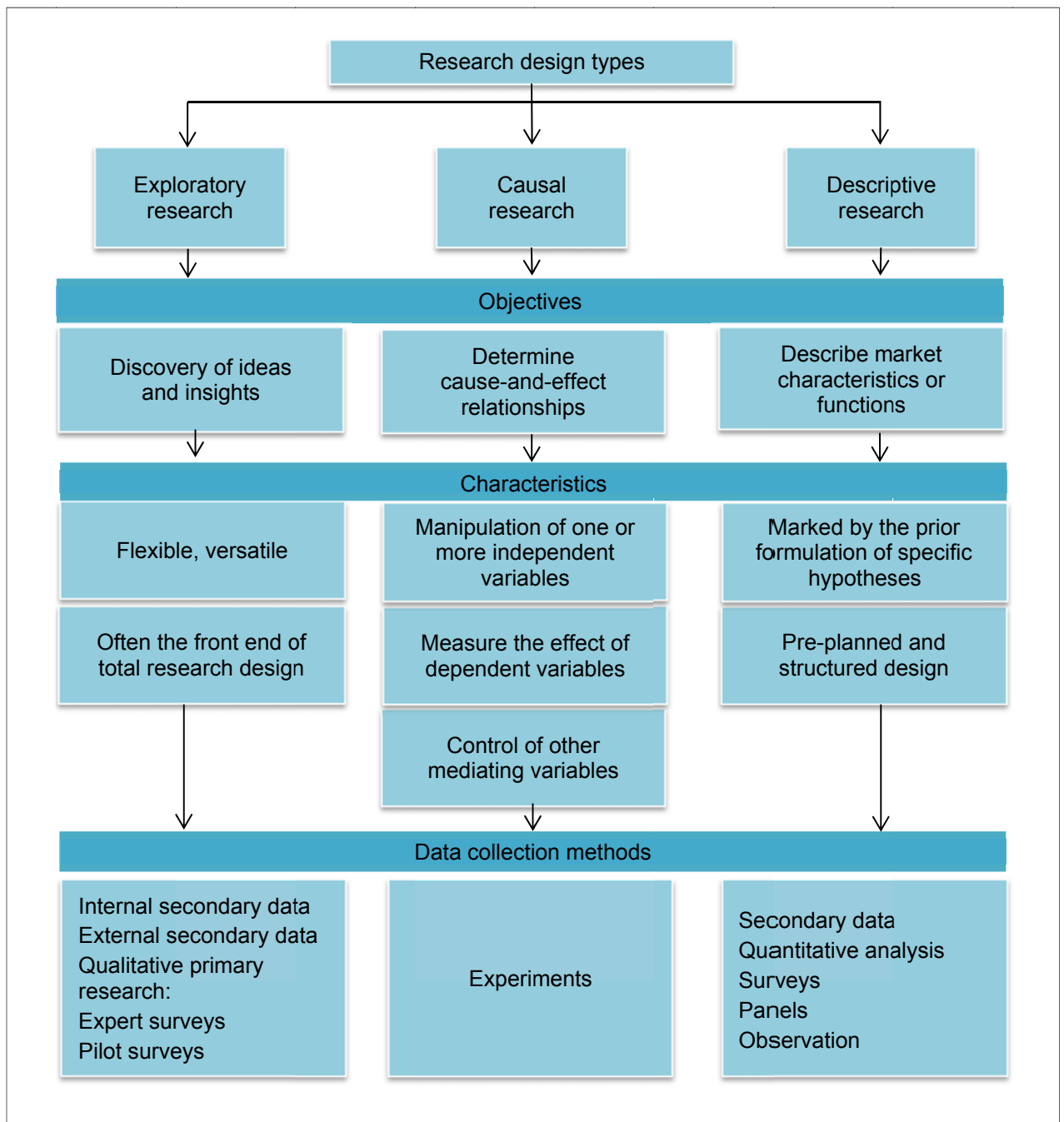


Figure 11: Types of research design
Source: Adapted from Tustin *et al.* (2005:83) and Malhotra (2010:104).

5.2.4.2 CAUSAL RESEARCH

Researchers make use of causal research to come to a conclusion on whether a cause-and-effect relationship exists between two or more variables (Malhotra, 2010:113). The factor causing the problem is identified by controlling various other factors and

investigating their effect (Burns & Bush, 2000:78). Causal research is used to determine (Malhotra, 2010:113):

- independent variables (cause) and dependent variables (effect) of the problem;
- relationship between the causal variables; and
- predicted outcome of the relationship.

In order to measure these causal relationships, planned and structured designs need to be used, usually in the form of experiments (Malhotra, 2010:113; Tustin *et al.*, 2005:87; Burns & Bush, 2000:78). The last type of research design is descriptive research.

5.2.4.3 DESCRIPTIVE RESEARCH

Descriptive research is used when knowledge about a particular aspect is vague (Cant, 2010:75). It is used to describe the research by providing answers to the questions of who, what, when, where, why and how of the research (Malhotra, 2010:106). As these questions need to be answered and hypotheses need to be formulated beforehand, a descriptive design is pre-planned and needs clearly defined information. It is further believed that descriptive research is conducted to (Malhotra, 2010:106):

- describe the characteristics of relevant groups;
- estimate the percentage of the sample that is exhibiting a certain behaviour;
- determine the perceptions of product characteristics;
- determine the degree to which marketing variables are associated; and
- make specific predictions.

This type of research design is very commonly used in marketing research as it allows management to come to conclusions regarding their customers, target market and competitors, to name but a few (Burns & Bush, 2000:77–78). Tustin *et al.* (2005:87) believe that exploratory research is used to determine the problem in the research study. Descriptive or causal research is then used to narrow the possible causes. The current study aimed to discover the role that social media plays as an information source in the decision-making process of first-year students in selecting a university to attend. Taking the above into consideration, this study can be considered as being descriptive in nature.

5.2.5 STEP 5: IDENTIFY INFORMATION TYPES AND SOURCES

During this step of the research process, the stated research objectives need to be transformed into precise data needs, so that the correct information can be obtained to solve the problem at hand (Cant, 2010:76). There is a wide variety of data collection methods that can be used to collect information and it is important to identify the correct one for the particular research study.

Before selecting a data collection method, the difference between primary and secondary data needs to be discussed as different data collection methods are used for different types of data. Data can be classified as either primary or secondary data based on the following dimensions (Hair *et al.*, 2006:64):

- Does the data already exist?
- Has the data been interpreted by someone else?
- Does the researcher understand the reasons why the data was collected?

As can be seen in Figure 12 below, primary and secondary data has data collection methods that are unique to them.

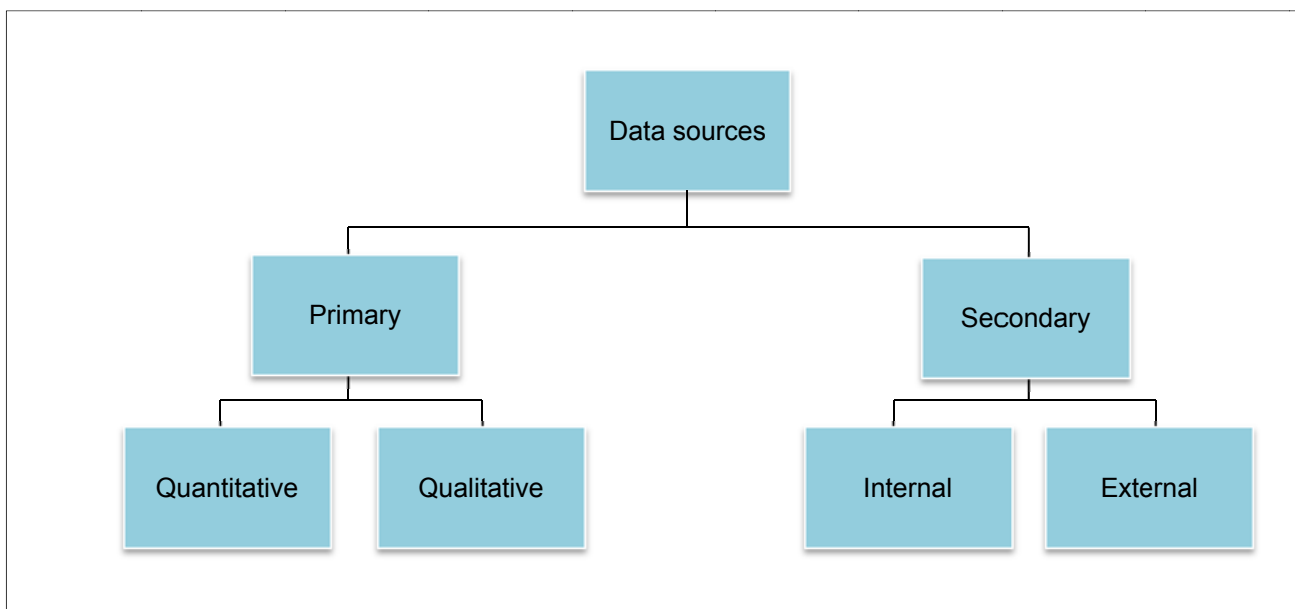


Figure 12: Data sources

Source: Adapted from Tustin *et al.* (2005:120).

Primary and secondary data will now be considered in more detail.

5.2.5.1 SECONDARY DATA

Secondary data can be defined as existing data that was collected before this research for a purpose other than the one currently being investigated (Cant, 2010:129). It can also be seen as the "...interpretations of primary data" (Cooper & Schindler, 2006:166). Secondary data has various advantages and disadvantages which are summarised in Table 8 below.

Table 8: Advantages and disadvantages of secondary data

Advantages	Disadvantages
The data is immediately available	No secondary data available for the specific problem
It is very cost-effective to collect	It may not be relevant to the problem at hand
Exploratory research can simplify the research problem at hand	Data may be inaccurate and contain sources of error
Research can be collected confidentially	It may not be sufficient to make a decision or solve the problem
The answer to the research problem can be provided	
Alternative primary data research methods and potential problems can be identified	
Background information can be provided	
The sample frame can be supplied	

Source: Adapted from Tustin *et al.* (2005:120 – 121) and Burns and Bush (2005:166 – 168).

Although secondary data was collected for another purpose, it is possible that the data may be relevant to the problem that is currently being investigated, but the relevance and accuracy should be taken into consideration when using secondary data (McDaniel & Gates, 2010:74).

There are two types of secondary data available, namely internal and external data. Internal secondary data refers to data that was produced inside an organisation as a result of conducting business. Examples of internal secondary sources include internal reports, annual reports, sales data and customer profiles to name a few (McDaniel & Gates, 2010:72; Tustin *et al.*, 2005:122). External secondary data is data collected from sources outside of the organisation. Examples include business data published by government,

census data, news media, journals and books such as encyclopaedias, dictionaries and textbooks (McDaniel & Gates, 2010:72; Cooper & Schindler, 2006:167).

Cant (2010:129) suggests that all research should start by looking critically at secondary data as it is a cost-effective way of obtaining information needed (McDaniel & Gates, 2010:72). Thus, this study started off with an in-depth review of available literature. In Chapter 2 the South African higher education environment was explained and the marketing communication used within this industry was covered. Chapter 3 considered social media as a marketing channel and how universities currently use social media marketing. The last literature chapter was Chapter 4 where the focus was on the decision-making process and also the information sources used by students to choose a university to attend.

The secondary data was collected from literature that was found in academic journal articles, textbooks and previous dissertations. This review of the literature could not, however, satisfy this study's research objectives and primary data needed to be collected.

5.2.5.2 PRIMARY DATA

When secondary research does not yield sufficient data to solve the research problem, primary research needs to be conducted. Primary research is the collecting of original, first-hand, raw data with the objective of solving a specific research problem (Hair *et al.*, 2006:64; Tustin *et al.*, 2005:142). This data is called primary data. Primary data is the result of conducting an exploratory, descriptive or causal research study by making use of a specific data collection method (Hair *et al.*, 2006:64). When the need for primary research has been established, the data collection method needs to be selected (Tustin *et al.*, 2005:142). This data collection method can be either qualitative or quantitative in nature.

- **Qualitative research**

Qualitative research is research that is used to "...gain preliminary insights" into the research problems of exploratory designs (Hair *et al.*, 2006:173). Small samples of

respondents are asked to speak freely about a certain topic in order to collect detailed data (Cant, 2010:128). This makes qualitative data a flexible, unstructured approach that collects data with the aid of group discussions and in-depth interviews (Tustin *et al.*, 2005:90). The different types of qualitative data collection methods include the following:

- *Focus groups*: This is the most popular form of exploratory research and consists of 8 to 12 participants that have an in-depth discussion about a certain topic which is led by a moderator (McDaniel & Gates, 2010:45). The researcher, however, does not only ask questions and record the answers. A discussion guide is used to guide the moderator on topics that need to be covered (McDaniel & Gates, 2010:101). The significance of a focus group lies in the group discussions bringing to light unanticipated findings (Malhotra, 2010:173).
- *In-depth interviews*: These are based on the same unstructured concept as focus groups, the difference being that they are one-on-one interviews. The expert interviewer probes the participant to expose the essential "...motivations, beliefs, attitudes and feelings on a topic..." (Malhotra, 2010:185–186).
- *Projective techniques*: Projective techniques are used to explore underlying feelings (McDaniel & Gates, 2010:111). This is achieved by asking respondents to evaluate others' behaviour and indirectly they "...project their own motivations, beliefs, attitudes and feelings" (Malhotra, 2010:190). The most common forms of projective techniques used in marketing are word association tests, cartoon tests, consumer drawings, photo sorts, sentence and story completion tests, storytelling and third person techniques (McDaniel & Gates, 2010:111).

All of these qualitative methods are costly data collection methods that rely on face-to-face contact with respondents. Due to the limited budget and the widely dispersed sample, qualitative research was not chosen for this study. Quantitative research will now be discussed.

- **Quantitative research**

Quantitative research is described by Cant (2010:128) as being descriptive in nature and used to describe research which is structured and quantifiable as it is reported by using numbers or statistical parameters. Structured questions with predetermined response

options are used to collect the data that is needed from a large sample of respondents (Hair *et al.*, 2005:171). Methods that are used in quantitative research include observation and surveys.

- *Observation*: The method of observation is used to record behavioural patterns to obtain data about people being observed. There are different observation methods, namely personal observation, mechanical observation, audits, content analysis and trace analysis (Malhotra, 2010:231).
- *Survey*: The survey method is used to collect facts, opinions and motives from people using a structured questionnaire. When using survey methods, respondents are contacted in person, by mail, telephone or email to collect the data (Malhotra, 2010:212).

In Table 9 below the differences between qualitative and quantitative research are summarised. It is important for researchers to select the most appropriate research method for this research study based on the different characteristics.

Table 9: Qualitative vs quantitative research

	Qualitative	Quantitative
Focus of research	Understand and interpret	Describe, explain and predict
Research design	Normally exploratory	Descriptive and causal
Sample size and representativeness	Small, limited to sampled respondents	Large, normally good representation of target population
Information per respondent	Much	Varies
Types of questions	Open-ended, semi structured, unstructured, deep probing	Mostly structured
Time of execution	Short time frames	Significantly longer time frames
Feedback turnaround	Data collection is faster due to small sample sizes Data analysis is shorter as insights are developed during the research	Lengthy turnaround due to larger sample sizes Insights can only follow data collection and data entry
Types of analyses	Debriefing, subjective, content, interpretive, semiotic analyses	Statistical, descriptive, causal predictions and relationships
Generalisability of results	Very limited, only preliminary insights and understanding	Usually very good, inferences about facts, estimates of relationships

Source: Adapted from Tustin *et al.* (2005:90), Cooper and Schindler (2006:199) and Hair *et al.* (2005:172).

For the purpose of this study data needed to be collected in order to come to certain conclusions regarding first-year students' use of social media and to determine if it had an

influence on their decision making regarding which university to attend. Survey research was used as it was possible to collect the relevant data by asking specific questions regarding behaviour when information was collected at different universities by means of a structured questionnaire. This method of data collection has also been used in previous studies of this nature (Simões & Soares, 2010; Brown *et al.*, 2009; Bonnema & van der Waldt, 2008; Wiese, 2008; Briggs & Wilson, 2007; Veloutsou *et al.*, 2005; Hoyt & Brown, 2003; Moogan & Baron, 2003; Moogan *et al.*, 2003). Thus this study was quantitative in nature.

As was mentioned previously, there are different types of survey methods which are classified on the basis of communication (Cooper & Schindler, 2006:253). These types of survey methods can be seen in Figure 13 below. They will now be discussed in detail.

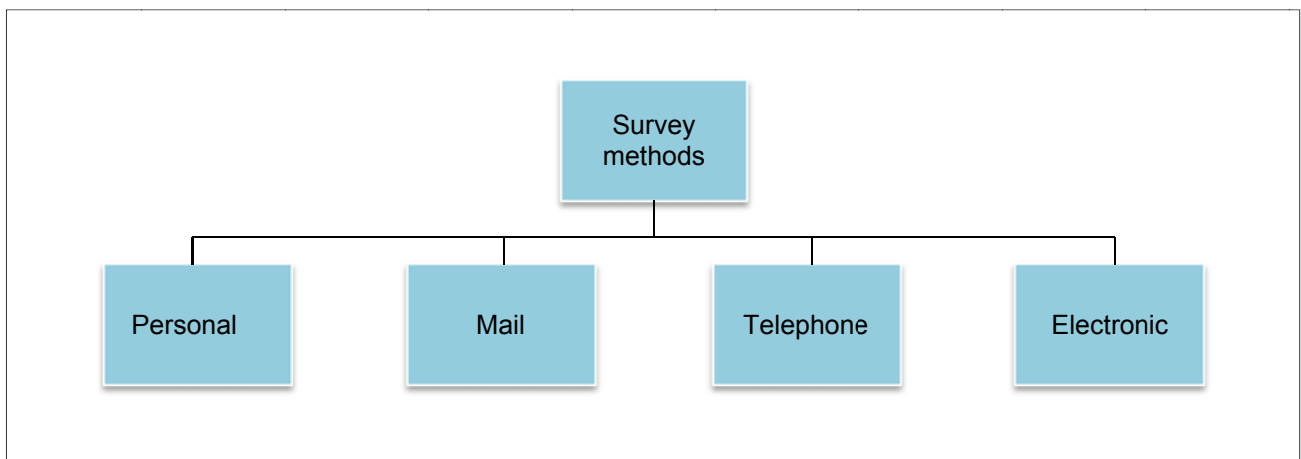


Figure 13: Types of survey methods

Source: Adapted from Cant (2010:87).

Personal surveys are conducted by a trained interviewer in a face-to-face environment (Cant, 2010:86). Respondents are usually intercepted in a location and asked to complete a questionnaire. This can be with or without an interviewer present (Cooper & Schindler, 2006:253). The advantages of a personal survey are that (Cooper & Schindler, 2006:253):

- respondents tend to cooperate better;
- the interviewer can answer questions the respondent may have or probe for answers;
- the interviewer can collect extra data by means of observation;
- illiterate respondents can be reached; and

- the interviewer can pre-screen a respondent to see if they fit the population of the study.

The disadvantages of this method are that it is very costly, interviewers need to be trained, longer periods are needed in the field, respondents may be widely dispersed geographically and not all participants are available or accessible (Cooper & Schindler, 2006:253). Due to the nature of the population in this study, the survey method was not suitable as the population was widely dispersed. The other survey methods were better suited to the population.

Mail surveys are used to send the questionnaire to the selected sample using the postal service and a return envelope is included. This self-administered survey allows the respondent to complete the survey in their own time which increases anonymity and provides them with time to think about their answers. The response rate is, however, very low, turnaround times are very long and often surveys returned only represent the extreme of the population. An accurate mailing list is also needed for this method (Cooper & Schindler, 2006:253).

With a telephone survey the selected sample is phoned and interviewed on the telephone by an experienced interviewer. Interviews can be conducted on a more widely dispersed sample with fewer interviewers than a personal survey. The response rate is lower than with personal interviews and the interview length needs to be limited due to cost (Cooper & Schindler, 2006:253).

With electronic surveys the researcher uses either email or the internet to administer the questionnaire. Data for this study was collected by using an electronic survey. Respondents were sent an email with a link to a web-based questionnaire over a period of four weeks. No incentives were provided to respondents to complete the questionnaire. The following advantages led to web-based surveys being selected as the primary data collection method (Wiid & Diggins, 2013:126; Cooper & Schindler, 2006:25):

- *Cost effectiveness:* Web-based questionnaires are not only good for the environment, but also reduce overall costs. Questionnaires do not have to be printed and distributed and fieldworkers do not have to be trained and remunerated for their

services. With a limited budget available for data collection, an online survey was the most viable for this study.

- *Quick and convenient delivery and responses:* The questionnaires are delivered in a short period of time and can be completed as soon as the respondents open them. The data is collected faster online than with mail surveys, personal interviews and telephone surveys, as the responses are sent electronically to a database for capturing as soon as the questionnaire is completed.
- *Convenient for respondents:* Respondents do not feel the need to respond as quickly as with telephone and personal interviews, as they can complete the survey on their own time and at their own pace. Thus it is expected that more considered responses will be collected.
- *No interviewer bias:* As there are no fieldworkers involved in the collection of the data, interviewer bias is eliminated.

There are, however, drawbacks to this method that had to be taken into consideration (Wiid & Diggines, 2013:127):

- *Anonymity:* The email address of a person is linked to a specific address on a network and, in the case of students, to a student number. In the case of this research study, the email address was used only to send the questionnaire. The data received back was not linked to an email address, but rather to a respondent number, making it very hard to trace the questionnaire back to a specific person.
- *Spam:* The questionnaire had the risk of being seen as junk mail. However, it was sent from a university address which should have prevented the email from being directed to the respondents' junk mail box.
- *Potential for sampling errors:* Respondents will decide if they want to complete the questionnaire or not, making room for sampling errors.

In the next section the design of the questionnaire is discussed in detail.

5.2.6 STEP 6: DEVELOP A SAMPLING PLAN

This section will be discussed according to the steps in the sampling process as set out in Wiid and Diggines (2013:185). The steps are defining the population, identifying the

sampling frame, selecting the sampling methods, determining the sample size, selecting the sample elements and gathering data from designated elements.

5.2.6.1 TARGET POPULATION

The population of a study can be defined as the entire group of elements which the researcher wants to come to conclusions about (Cooper & Schindler, 2006:402). The target population consisted of first-year students at the University of South Africa. For the purpose of this study, only first-year students were selected as they had recently been through the process of selecting a university. Grade 12 learners were excluded as they still need to make a choice and have not gone through all the necessary decision-making steps yet. The units of analysis were the individual first-year students.

5.2.6.2 SAMPLING FRAME

According to Wiid and Diggins (2013:183), the sampling frame is the actual list from which the researcher will draw a sample. The sampling frame for this study was the database of first-year students of the College of Economic and Management Sciences (CEMS). From this, a database of email addresses was made available and the sample was drawn from that.

5.2.6.3 SAMPLING METHOD

A sample can be selected by making use of either non-probability sampling or probability sampling. Non-probability sampling is characterised as being subjective, as the researcher uses personal judgement to choose the sample. Thus each member of the population does not have a known chance of being selected for the sample (Malhotra, 2010:376; Cooper & Schindler, 2006:407). Grounded on the theory of random selection, with probability sampling the entire population has a possible chance of being included in the sample. Thus the findings from a probability sample can be generalised to the sample population (Malhotra, 2010:376; Cooper & Schindler, 2006:408). The sample for this study was drawn from the target population using probability sampling, as it is more statistically

sound than non-probability sampling and access was provided to a database of first-year students in CEMS at Unisa. There are four probability sampling techniques that can be used, namely simple random sampling, systematic sampling, stratified sampling and cluster sampling (Malhotra, 2010:382–387).

The sample was selected using simple random sampling, which works on the same basis as names being thrown into a hat and randomly drawn. Each element of the population has a known and equal probability of selection (Malhotra, 2010:382). Access was granted to a database of first-year students in CEMS at Unisa. The database was loaded into SAS Jump and a random number generator was run to select a simple random sample of students.

The main advantages of this method are that it is easy to implement (Cooper & Schindler, 2006:414), easy to understand and the results can be projected to the target population (Malhotra, 2010:383). But Cooper and Schindler (2006:416) also point out the following disadvantages of this method: 1) a list of population elements is required, 2) it can be time consuming and expensive and 3) larger samples are required than with other probability methods. These disadvantages were, however, countered in the following ways:

- Access was granted to a list of population elements by the university with email addresses to contact the sample.
- By using a computer program to generate the sample, time and money were saved as the process took about 10 minutes.

5.2.6.4 SAMPLE SIZE AND SAMPLE ELEMENTS

The aim of this research study was to achieve a minimum sample of 150 respondents. Due to the fact that the response rate of online surveys is very low, the survey was sent to 10 000 respondents at Unisa. The sample elements were the individual first-year students selected to complete the questionnaire. The last step in this process will be discussed in the next section regarding data collected from the sample.

5.2.7 STEP 7: DESIGN RESEARCH INSTRUMENTS

The design of the questionnaire is a very important aspect of the research process. The purpose of the questionnaire is to collect responses from the selected sample which will in turn determine if the objectives for the study have been achieved.

Parasuraman, Grewal and Krishan (2007:284) suggest a series of steps that need to be followed when designing a questionnaire. The main steps in this process can be seen in Figure 14 below. It is also important to note that a review takes place at each step and changes are made as deemed necessary.

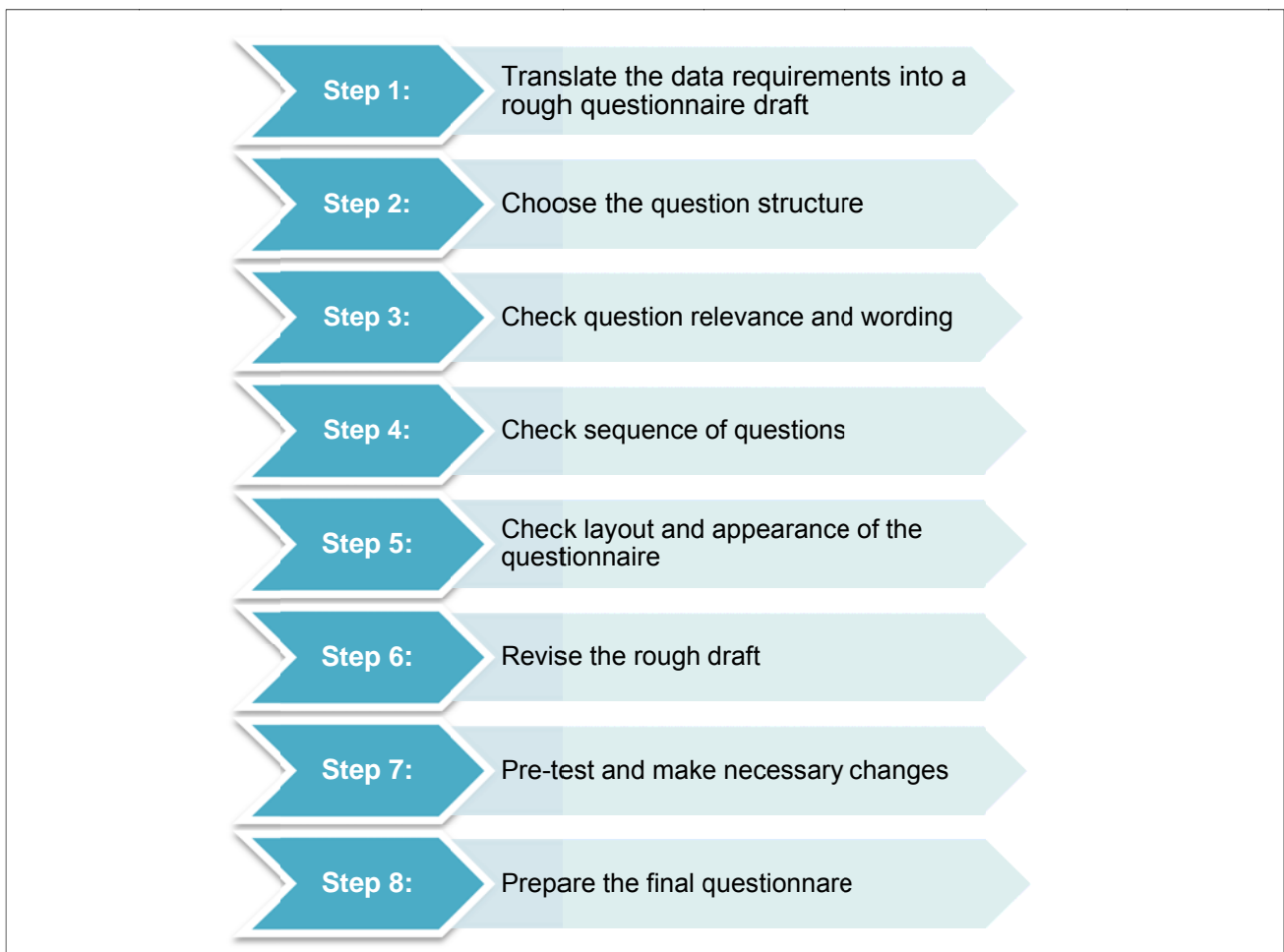


Figure 14: Questionnaire design process

Source: Adapted from Parasuraman *et al.* (2007:284).

The rest of this section will be structured according to Figure 14 above.

5.2.7.1 STEP 1: TRANSLATE THE DATA REQUIREMENTS INTO A ROUGH QUESTIONNAIRE DRAFT

The first step in the design of a questionnaire is to determine what information is needed from the respondents (Malhotra, 2010:336). In step 3 of the research process, research objectives were formulated and in essence data is needed to achieve these set objectives. In Table 10 below states the research objectives for this study and the questions that needed to be asked to collect the necessary data. This is where the questionnaire development for this study started.

Table 10: Research objectives and survey questions matrix

Research objective	Question(s) that needed to be asked to get desired data
To determine the sources of information that students consult in university choice	What sources of information did first-year Economic and Management Sciences students use to choose a higher education institution?
To investigate the usefulness of information sources that students consult in university choice	Which information sources did first-year Economic and Management Sciences students find useful in choosing a higher education institution?
To determine the credibility of social media as an information source	How credible is social media as an information source? In what age group do you fall? Do Generation Y students find social media to be a more useful source of information than older students?
To determine which specific social media platforms are the most popular amongst students	What social media platforms do you have a profile on? Which social media platform do you use most for collecting information about universities?
To investigate if social media has an influence on the student decision-making process in university choice	Did social media influence your decision-making process when deciding on a university to attend?
To determine if students in different age groups differ in their use of social media	What activities do you engage in on social media? In what age group do you fall?
To determine how much time students in different age groups spend on social media	How many hours per day do you spend on social media? How many times a day do you log on to social media? In what age group do you fall?

After the data requirements were established, the question structure needed to be determined.

5.2.7.2 STEP 2: CHOOSE THE QUESTION STRUCTURE

During the second step of the questionnaire design process the structure of the questions that are going to be used needs to be determined. Malhotra (2010:343) explains that questions can either be structured or unstructured.

Structured questions have a set of responses and the respondent needs to choose one or more options as indicated. Cooper and Schindler (2006:368–373) describe the different types of structured questions:

- *Dichotomous questions*: These questions are limited to only two responses where a respondent either accepts the alternative or not. In the questionnaire this type of question was used to ask students for their gender category (See Annexure A, question 11).
- *Multiple-choice, single-response questions*: These questions are used when there are more than two alternatives the respondents need to consider, but they can choose only one. In the questionnaire this type of question was used to ask students to indicate in which age category they fell (question 12), how many times a day they accessed social media (question 8) and how many hours a day they spent on social media (question 9) (See Annexure A, questions 12, 8, 9).
- *Multiple-choice, multiple-response questions*: These questions are similar to multiple-choice questions in that there are more than two alternatives the respondents need to consider, but they can check all that is applicable. In the questionnaire these questions were used to ask which sources of information the student used when searching for information on which university to attend (See Annexure A, question 1), what social media platforms they used to gather information on universities (See Annexure A, question 4) and also which devices they used to access social media (see Annexure A, question 10).
- *Rating questions*: These questions ask the respondent to position each item on a scale. This type of question was used to measure the usefulness of information sources (see Annexure A, question 2) and the perceived credibility of these sources (see Annexure A, question 3). Rating questions were also used to investigate the perceived and actual influence of social media on the decision making process (see

Annexure A, questions 5 and 6). Social media usage was also measured using a rating scale (see Annexure A, question 7).

Unstructured questions or open-ended questions are set in such a way that respondents can answer the questions in their own words. These types of questions were limited to an “Other” option which was included in question 4 on which social media platforms were used to gather information on universities. These questions are difficult to interpret and analyse (Cooper & Schindler, 2006:368).

5.2.7.3 STEP 3: CHECK QUESTION RELEVANCE AND WORDING

After the questions were set and the structure finalised, the questionnaire was checked for question relevance and wording, which is step 3 in the questionnaire design process. Kolb (2008:208) indicates the following criteria that need to be taken into account in the design of online surveys with reference to question relevance and wording:

- *Eliminate unnecessary questions:* All the questions in the questionnaire were reviewed, and there were no unnecessary questions as the research objectives were used as a guide to formulate them.
- *Restrict response choices:* As indicated in the previous section, responses were restricted by using mainly structured questions. The only place where respondents could answer by typing in their own words was in question 4, which made provision for an “Other” option (see Annexure A).

5.2.7.4 STEP 4: CHECK SEQUENCE OF QUESTIONS

The questions were grouped into four sections according to topic to make it easier for students to go through the questionnaire. The five sections were information sources, perceived credibility, use of social media in university choice, social media usage and general information. The demographic questions were asked as part of background information and were the last questions in the questionnaire. Parasuraman *et al.* (2007:299) stress that demographic questions need to be asked at the end of the questionnaire, as it may irritate respondents if they are asked at the beginning of the questionnaire.

5.2.7.5 STEP 5: CHECK LAYOUT AND APPEARANCE OF QUESTIONNAIRE

The layout of a questionnaire is very important as it can confuse respondents and lead to unanswered questions (Kolb, 2008:205). The questionnaire started with an introduction screen which welcomed the respondent and provided some background information on the study. This was the only page that contained graphics in the form of the university logo. It informed the respondent on the time needed to complete the questionnaire. It also informed the respondent that the questionnaire was anonymous and that the responses would only be used for academic research purposes. The screen also acted as an informed consent form which was agreed to when the respondent clicked the next button. On this screen it was also indicated that respondents were allowed to interrupt the survey and come back to it later.

In order to make the questionnaire feel shorter, there was a maximum of only two questions per screen, after which the respondent needed to click the Next button. With Limesurvey the respondent can see at all times how far they have progressed with the survey by means of a percentage bar at the top of the screen.

5.2.7.6 STEP 6: REVISE THE ROUGH DRAFT

The rough draft of the questionnaire was revised by the supervisor and statistician before it went on to pre-testing.

5.2.7.7 STEP 7: PRE-TEST AND MAKE NECESSARY CHANGES

Pre-testing is when the questionnaire is tested on a small sample of respondents to identify potential problems and objects that are unclear (Malhotra, 2010:354). The data collection instrument for this study was pre-tested on a representative sample of respondents. They were asked to complete the questionnaire and highlight potential problems in it and questions that were not clear. They were also asked to indicate the time

that it took them to complete the questionnaire. The questionnaire was revised where necessary.

5.2.7.8 STEP 8: FINAL QUESTIONNAIRE AND ETHICAL CLEARANCE

The final questionnaire was approved by the university's ethical committee after which it was prepared and activated on Limesurvey on 27 November 2013. The full questionnaire as it appeared on Limesurvey can be seen in Annexure A.

5.2.8 STEP 8: COLLECTING DATA

The next step is conducting the fieldwork or collecting the data. Before data could be collected, approval needed to be obtained from the university. An application was addressed to the Ethics Committee of CEMS at Unisa in which the study was explained in detail. Permission was granted and access to a database of first-year students in CEMS was granted.

After approval, the developed questionnaire was converted into an electronic web-based survey using Limesurvey. During the period of November and December 2013 the selected sample was sent an invitation to participate in the research study in the form of an email. The email invitation also stated the purpose of the study, the name and affiliation of the researcher, a link to the survey on Limesurvey and contact details of the researcher and supervisor should there be any queries or questions. A copy of this invitation to participate can be seen in Annexure B. During the data collection process the researcher sent out two email reminders to respondents to complete the survey if they had not yet completed it. The responses of the completed surveys were stored on the electronic database of Limesurvey. It is important to note that no respondents were approached that were younger than 18 years of age. The next section will deal with the coding of the collected data.

5.2.9 STEP 9: CODING DATA

According to Tustin *et al.* (2005:457), coding is "...a technical process whereby codes are assigned to the respondents' answers prior to their tabulation". A coding manual was constructed which contained all the questions in the questionnaire and their possible answers, together with their codes. This coding manual can be seen in Annexure C.

5.2.10 STEP 10: CAPTURE, CLEAN AND STORE DATA

Wiid and Diggines (2013:221) explain that this process differs for web-based questionnaires. In this study the data was already electronically captured by Limesurvey in an Excel spreadsheet. This spreadsheet was read into SPSS, the data analysis package that was used. The first step in preparing data from web-based questionnaires is verifying and cleaning the data in SPSS (Wiid & Diggines, 2013:231). The cleaning process consists of dealing with values that fall outside of a scale code and data that was left out. Minimum values, maximum values, frequencies and means were calculated on each variable to look for errors in the data sheet (Wiid & Diggines, 2013:232). After the errors were detected and dealt with, the data was imported into SPSS and was labelled according to the coding manual in Annexure C. The data sheet was saved for the data analysis process.

5.2.11 STEP 11: DATA ANALYSIS

Data analysis is the process of editing and reducing accumulated data to a manageable size, developing summaries, looking for patterns and applying statistical techniques (Malhotra, 2010:42).

The data analysis in the next chapter is structured by first presenting the descriptive statistics of the nominal and ordinal variables in the study by means of frequencies and percentages. According to Malhotra (2010:484), a frequency distribution is a mathematical distribution that aims to indicate a count of the number of responses that are associated

with different values of one variable. These counts are expressed in percentage value (Wiid & Diggines, 2013:248).

5.2.11.1 DESCRIPTIVE AND INFERENCEAL STATISTICS

Next, the descriptive statistics of the interval variables are reported by making use of mean and standard deviation. The mean or average value is considered to be the most generally used measure of central tendency. It is the value that is acquired by summing all elements in a dataset and dividing it by the number of elements (Malhotra, 2010:486). The variance and standard deviation are based on the deviations around the mean of the observation (Wiid & Diggines, 2013:249).

Unlike descriptive statistics, inferential statistics provide a measure of probability to test a hypothesis regarding data or groups of data (Diamantopoulos & Schlegelmilch, 2000:65). Inferential statistics use the data to conclude how the population may behave. Hypothesis testing can be either parametric or non-parametric (Malhotra, 2010:503). Parametric tests assume that variables are measured on an interval scale, the most popular being the t-test. Non-parametric tests assume that variables are measured at a nominal or ordinal scale by using the Mann-Whitney U test and the Kruskal-Wallis test, collectively referred to as the Wilcoxon tests (Malhotra, 2010:503).

All three tests employed in this research were conducted and reported. Where differences in significance occurred, the nature of the data was investigated to ensure that the correct results were reported. Note that the statistical tests were conducted at the 0.05 level of significance to ensure a 95% level of confidence in the results obtained.

5.2.11.2 RELIABILITY AND VALIDITY

Reliability refers to the degree to which consistent results are produced by an instrument when measurement is repeated (Malhotra, 2010:318). Internal reliability is tested with a technique called item analysis which produces Cronbach's alpha (Wiid & Diggines, 2013:238). A Cronbach's alpha value above 0.8 indicates good reliability. A value between

0.6 and 0.8 indicates acceptable reliability and a value below 0.6 is deemed unacceptable. Cronbach's alpha was used in this study to test internal reliability (Malhotra, 2010: 319). After analysing the data, the findings can be reported.

5.2.12 STEP 12: PRESENTING THE FINDINGS

The last step in the research process is the presentation and reporting of the findings. This will be dealt with in Chapters 6 and 7. The research objectives formulated in step 3 of the process are clearly linked to the results obtained (Tustin *et al.*, 2005:107). From this, recommendations are made and areas of future research identified.

5.3 CONCLUSION

This chapter provided a comprehensive overview of all the steps in the research process and how they were applied in this study. The study followed a descriptive research design by using quantitative data to achieve the research objectives. Probability sampling in the form of simple random sampling was chosen to select the sample for the study. The research was conducted at the University of South Africa among a sample of first-year Economic and Management Sciences students by making use of an electronic survey. In the next chapter the results and findings will be discussed.

CHAPTER 6

RESEARCH FINDINGS

6.1 INTRODUCTION

In this chapter the results of the research conducted are discussed. The discussion will start with the response rate of the survey, followed by a respondent profile. The descriptive and inferential statistics are discussed for all questions in the survey. The last section deals with reliability and validity of the scales used in the questionnaire.

The primary research objective of this study was to determine the role of social media, as an information source, in the decision-making process of students when selecting a university to attend. This primary objective was supported by the following secondary objectives:

- To determine which information sources students consult in university choice
- To investigate the usefulness of information sources that students consult in university choice
- To determine the credibility of social media as an information source
- To determine which specific social media platforms are the most popular amongst students
- To investigate if social media has an influence on the student decision-making process in university choice
- To determine if students in different age groups differ in their use of social media
- To determine how much time students spend on social media

6.2 RESPONSE RATE AND RESPONDENT PROFILE

The analysis of the response rate and respondent profile will be discussed in more detail in this section. The respondent profile is based on the gender and age profile of respondents.

6.2.1 RESPONSE RATE

The data collection for this study was conducted from October to December 2013. An email inviting students to complete the survey was sent to an initial sample of 5 000 students on 23 October 2013, and two reminders to complete the survey were also sent out during the month. A second sample of 5 000 was drawn on 28 November 2013 and two reminders were sent out during the month. Of the 10 000 students that were invited to complete the survey, 379 respondents accepted the invitation and accessed the online survey. A final sample size of 156 respondents was used to do the analysis. Only fully completed surveys were used for data analysis and 225 surveys were excluded from the analysis as the respondents did not complete the questionnaire. As can be seen, the overall response rate was very low (3.8%). However, this is not uncommon for self-administered surveys and it is one of the disadvantages of this method (Rensburg & Cant, 2009:79).

6.2.2 RESPONDENT PROFILE

A profile of first-year students in CEMS at Unisa was constructed using age and gender variables. These questions were placed at the end of the questionnaire (questions 11 and 12). When considering the gender distribution of the students, the results indicate that 59.0% (n = 92) of the respondents were female and 41.0% (n = 64) were male. This is illustrated in Figure 15 below.

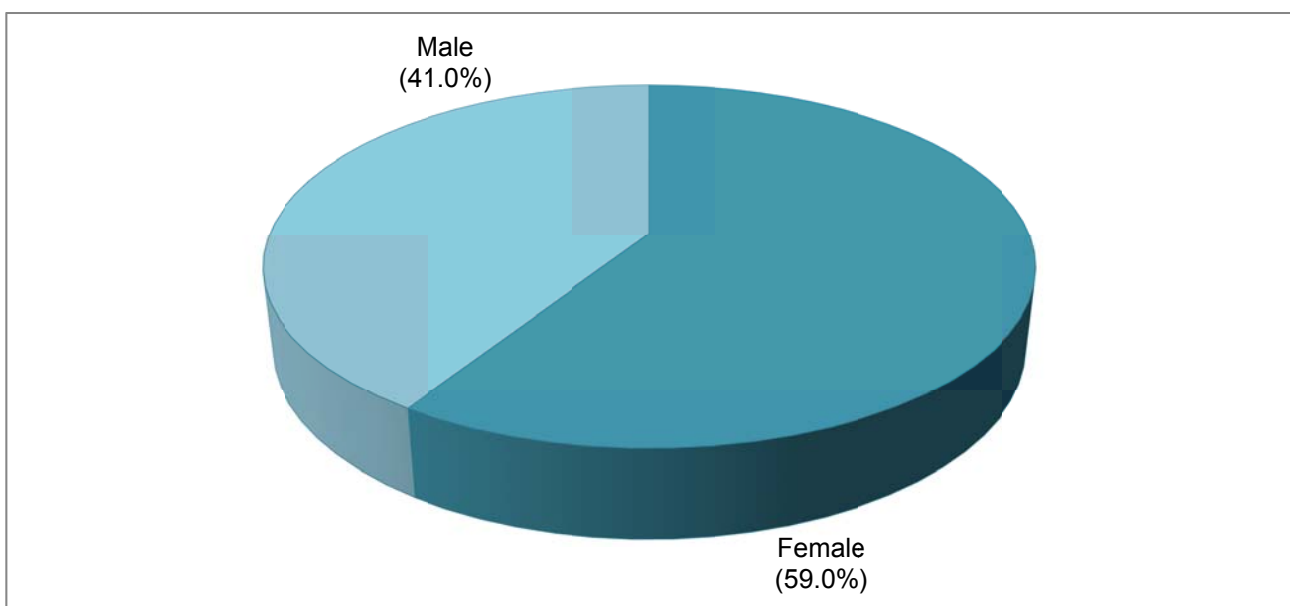


Figure 15: Gender distribution of respondents (n = 156)

The age distribution of respondents can be seen in Figure 16 below. Most of the respondents fell into the age category of 21 – 25 years old (24.3%; n = 38) and the second largest group was the age category of 26 – 30 years old (17.3%; n = 27). The age categories 31 – 35 years and 36 – 40 years had 26 respondents each (16.7% each; n = 26 each). The majority of respondents were 30 years or younger (53.1%; n = 83).

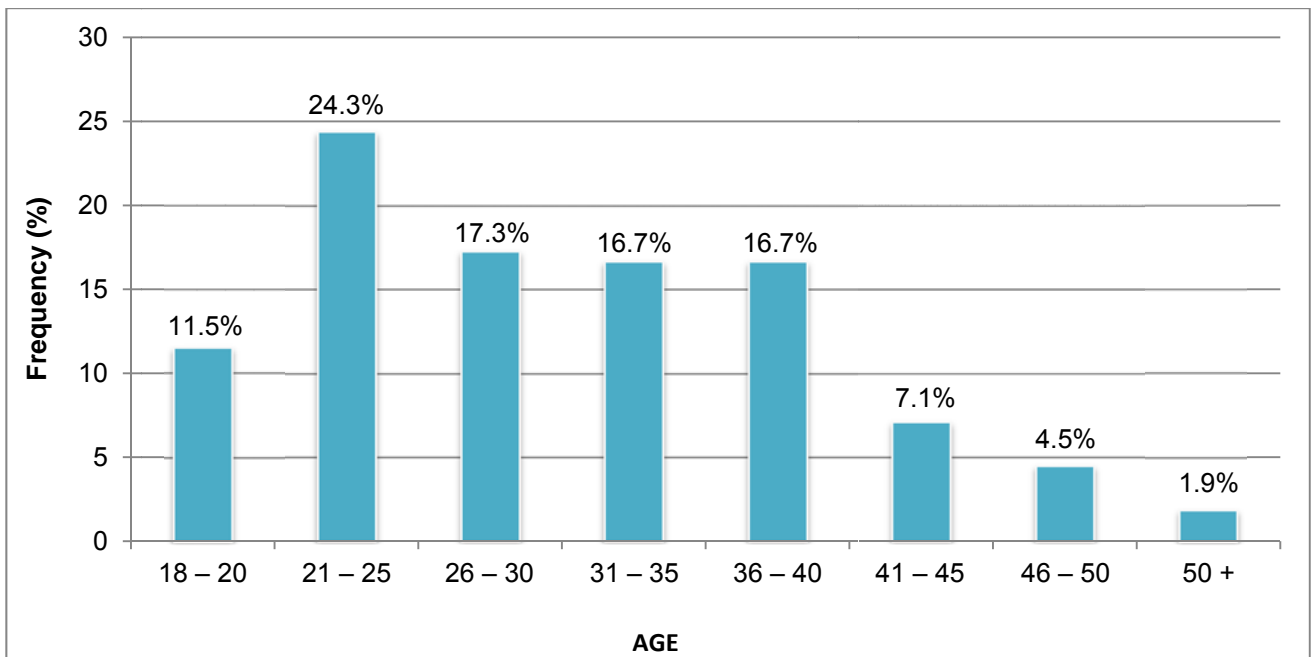


Figure 16: Age distribution (n = 156)

The rest of the descriptive statistics will be dealt with in the same order as the relevant questions appeared in the questionnaire.

6.3 DESCRIPTIVE STATISTICS

Descriptive statistics are calculated and reported first when analysing data as it is the most efficient way of reviewing large sets of data and determining their characteristics (McDaniel & Gates, 2010:406). The descriptive statistics in the form of frequency counts, means, graphs and tables will be reported in the same order as the relevant questions appeared in the questionnaire in order to get a good overview of the data that was collected. Descriptive statistics for questions where only a graph were used for reporting purposes are all included in Annexure D.

6.3.1 INFORMATION SOURCES USED BY STUDENTS IN UNIVERSITY CHOICE

Question 1 of the questionnaire was a multiple-choice, multiple-response scale question and was asked to determine which information sources students used when choosing which university to attend (see Annexure A, question 1). Table 11 shows that the majority of respondents (88) made use of the university website (56.4%) to gather information on the university they wanted to attend. A total of 54 respondents (34.6%) obtained information from friends, and word-of-mouth was selected by 52 respondents (33.3%). Previous research conducted did not include social media as a potential source of information that students used when collecting information on universities. As social media is increasingly being used by students, it was added to the list of previously identified information sources in this study. It is interesting to note that 22 respondents (14.1%) indicated that they used social media as an information source to gather information on the university they wanted to attend. Table 11 also shows that of the 156 respondents, only 4 (2.6%) selected events on campus, 6 (3.8%) selected open days and 8 (5.1%) selected high school teachers, making these the least used sources of information in selecting a university to attend.

Table 11: Information sources used by students in university choice (n = 156)

Information sources used	<i>n</i>	%
University website	88	56.4
Friends	54	34.6
Word-of-mouth	52	33.3
Family members (not parents)	35	22.4
Students at university	29	18.6
Career advisors	29	18.6
University publications	29	18.6
Social media	22	14.1
Campus visits	22	14.1
Parents	18	11.5
Alumni members	12	7.7
High school teachers	8	5.1
Open days	6	3.8
Events on campus	4	2.6

Notes: The total number of response will not be equal to n and the percentages will not add up to 100 as it was a multiple-choice, multiple-response question. The percentage was calculated by dividing frequency count by n.

6.3.2 USEFULNESS OF INFORMATION SOURCES USED BY STUDENTS

In question 2, the information sources identified in section 6.3.1 above were again used, but this time respondents were asked to indicate how useful the information source was to them in university choice. A 4-point Likert scale with the 14 information sources was used to measure the usefulness of these sources. The scale points ranged from 1 (Not at all useful) to 4 (Very useful), with 5 (Did not use the source) which could be selected if students did not consult this source. The results can be seen in Table 12 below. The majority of respondents (80.1%; n = 125) indicated that the university website was the most useful source of information for choice of university. This was followed by friends (67.3%; n = 105), word-of-mouth (63.5%; n = 99), university publications (55.7%; n = 87), students at the university (52.6%; n = 82), family members (not parents) (51.9%; n = 81) and social media (44.9%; n = 70). The sources that were considered to be the least useful were events on campus (16.7%; n = 26), alumni members (16.7%; n = 26) and open days (12.8%; n = 20).

Table 12: Usefulness of information sources used (n = 156)

Information source	Useful		Not useful		Not used	
	n	%	n	%	n	%
University website	125	80.1	9	5.8	22	14.1
Friends	105	67.3	18	11.5	33	21.2
Word-of-mouth	99	63.5	17	10.9	40	25.6
University publications	87	55.7	14	9.0	55	35.3
Students at the university	82	52.6	13	8.3	61	39.1
Family members (not parents)	81	51.9	17	10.9	58	37.2
Social media	70	44.9	25	16.0	61	39.1
Career advisors	69	44.2	19	12.2	68	43.6
Parents	63	40.4	18	11.5	75	48.1
Campus visits	59	38.0	23	14.7	74	47.4
High school teachers	49	31.4	18	11.5	89	57.1
Open days	36	23.1	20	12.8	100	64.1
Alumni members	35	22.4	26	16.7	95	60.9
Events on campus	35	22.4	26	16.7	95	60.9

As can be seen from the results discussed above, the university website, word-of-mouth and friends were considered to be the most useful information sources. Worth noting is that social media was also considered to be a useful source of information.

A very interesting finding from these results is that the traditional information sources, such as open days, events on campus and alumni, were not seen as useful. There could be two reasons for this. Students are becoming more technologically orientated and, as was discussed in Chapter 3, consumers are looking for real experiences from peers rather than marketing messages from the organisation. It could also be that the nature of the university is correspondence, making these types of information sources less useful due to the distance between the university and its students.

6.3.3 PERCEIVED CREDIBILITY OF SOCIAL MEDIA AS AN INFORMATION SOURCE

Respondents were asked to indicate their perceived credibility of social media as an information source in question 3. Perceived credibility of social media was assessed through four separate five-item, 5-point summated rating scales that measured the perceived credibility of the source of a message by considering:

- sincerity - the scale points ranged from 1 (Insincere) to 5 (Sincere);
- honesty - the scale points ranged from 1 (Not honest) to 5 (Honest);
- dependability - the scale points ranged from 1 (Not dependable) to 5 (Dependable);
- trustworthiness - the scale points ranged from 1 (Not trustworthy) to 5 (Trustworthy);
and
- credibility - the scale points ranged from 1 (Not credible) to 5 (Credible).

The responses given by each respondent to the five items overall were averaged to provide an overall perceived credibility score. Higher scores on the scale indicated that respondents perceived the information source to be highly credible and a lower score indicated that the respondents perceived the source of information as not credible.

The composite score of the scale was measured to determine overall perceived credibility of social media. The mean was above the halfway mark, which suggests that overall, respondents perceived social media to be a credible source ($M = 3.39$, $SD = 1.08$). As can be seen in Table 13 on the following page, all the items for perceived credibility of social

media indicate that respondents perceived social media to be an honest, sincere, trustworthy, credible and dependable information source.

Table 13: Perceived credibility of social media (composite and individual scores)

Perceived credibility items	<i>n</i>	<i>M</i>	<i>SD</i>
Honesty	116	3.52	1.17
Sincerity	121	3.50	1.25
Trustworthy	115	3.36	1.22
Credibility	120	3.33	1.21
Dependability	117	3.29	1.21
		3.39	1.08

Notes: Scale values range from 1 (Dishonest, Not sincere, Not trustworthy, Not credible and Not dependable) to 5 (Honest, Sincere, Trustworthy, Credible and Dependable); the higher a mean score, the more credible social media is perceived to be. *n* = number of respondents, *M* = mean, *SD* = standard deviation

From the above discussion, the data suggests that students perceive information that is placed on social media to be fairly credible.

6.3.4 SOCIAL MEDIA PLATFORMS USED TO GATHER INFORMATION ON UNIVERSITIES (QUESTION 4)

In question 4 respondents were asked to indicate which social media platforms they used to gather information on universities. It is important to note here that respondents were asked specifically for the platform used to gather information on universities and not the general social media used. Of the respondents that did make use of social media to gather information on universities, 57 (36.5%) used Facebook. The second most used social media platform was blogs with 18 respondents (11.0%), followed by LinkedIn with 14 respondents (14.0%). Of the respondents that answered the question, 43.5% (68 respondents) did not use social media to gather information on universities. There were 30 respondents who selected the Other option. From this it is clear that some students did not know exactly what social media is, as 12 respondents (40.0%) indicated that they used a website, 8 (26.6%) used Google, 4 (13.3%) used the internet and 1 (0.3%) used television. The remaining 5 respondents (16.7%) indicated that they used MXIT (1 respondent), wikis (1 respondent), myUnisa (1 respondent) or Whatsapp (2 respondents). Most of these are not considered social media, apart from MXIT, Wikis and Whatsapp; thus of the 30

responses in this category only 13.3% (n = 4) constituted valid alternative social media platforms. This can be seen in Table 14 below.

Table 14: Social media platforms used

Social media platform	<i>n</i>	%
Facebook	57	36.5
Blogs	18	11.5
LinkedIn	14	9.0
YouTube	12	7.7
Twitter	9	5.8
None	68	43.6
Other	30	19.2

Notes: The total number of response will not be equal to n and the percentages will not add up 100 as it was a multiple-choice, multiple-response question. The percentage was calculated by dividing frequency count by n.

The above data suggests that Facebook is the most popular social media platform used by respondents specifically to gather data on universities. This can be useful information for universities, as they know where they can use the majority of their resources. With the huge number of social media platforms available for marketing purposes, it is important for universities when developing a social media strategy to not try and use all platforms, as this appears to be unsuccessful. Finding out what social media platform the target market is using will result in a more effective strategy, and effort and time can go into that specific social media platform, instead of wasting resources on platforms that are not really being used.

6.3.5 PERCEIVED INFLUENCE OF SOCIAL MEDIA ON THE DECISION-MAKING PROCESS

Question 5 focused on the perceived influence of social media on the different phases of the decision-making process. All the scale points were labelled and ranged from 1 (No influence) to 5 (A very great deal of influence). Following the approach used by McQuiston (1989 in Bruner & Hensel, 1992:955), the higher scores suggest that the respondent perceived social media to have a great influence on their decision making, whereas the lower score implies that they believed social media had little influence on their decision making.

As can be seen in Table 15 below, respondents generally did not perceive social media to have a significant influence on the decision-making process when selecting a university. The distribution of the construct scores is non-normal. The reported mean score is 2.5 (SD = 1.292). The mean/median is widely dispersed with an interquartile range of 2.7. This could indicate that respondents had very different views on the influence of social media when selecting a university. The average view was that social media does have some perceived influence. The data in Table 15 below suggests that social media has a slightly higher perceived influence when searching for information, with a mean score of 2.58 (SD = 1.39), followed by a slightly higher perceived influence in the stage of the decision-making process that deals with evaluation of alternatives (M = 2.54, SD = 1.37). The least perceived influence of social media is in the first stage of the decision-making process, where the problem is identified (M = 2.34, SD = 1.33).

Table 15: Perceived influence of social media (n = 156)

	Item	M	SD
5.1	I believe the communication offered via social media influenced consideration when I realised I want to attend university.	2.34	1.33
5.2	I believe the communication offered via social media influenced consideration when I searched for information on universities.	2.58	1.39
5.3	I believe the communication offered via social media influenced consideration when I evaluated my alternatives.	2.54	1.37
5.4	I believe the communication offered via social media influenced consideration when I had to make a choice of which university to attend.	2.49	1.42
5.5	I believe the communication offered via social media influenced consideration throughout the entire university decision-making process.	2.40	1.36
		2.47	1.30

Notes: Scale values range from 1 (No influence) to 5 (A very great deal of influence); the higher a mean score, the more perceived influence the respondent felt social media had on their decision making. *n* = number of respondents, *M* = mean, *SD* = standard deviation

Looking at the results it can be determined that social media only has a slight perceived influence on the decision-making process of students when selecting a university to attend.

6.3.6 ACTUAL INFLUENCE OF SOCIAL MEDIA

In question 6 the actual influence of social media was measured. The original scale was used by Kohli (1989 in Bruner & Hensel, 1992:1000) and measured the degree to which a

member of a buying centre is perceived by another member to have influenced a particular purchase decision made by the buying centre (Bruner & Hensel, 1992:1000). The emphasis of the scale is on the result rather than the effort expended to achieve it. This nine-item, 5-point Likert-like summated rating scale (see Annexure A, question 6) was adapted to measure the influence of social media on the decision-making process of a student when choosing a university to attend. All the scale points were labelled and ranged from 1 (Very small influence) to 5 (Very large influence). In line with the original study, a higher score on the scale indicates that social media had a large influence on the students' decision, and a lower score indicates that social media had a small influence on the students' decision.

The results suggest that overall the respondents experienced social media to have a small influence on the university decision. A single score for actual influence of social media was determined by calculating the mean of the 5 items of this construct. The distribution of the construct scores is non-normal. The mean score is 2.47 and the median score is 2.33. The variation about the mean/median is widely dispersed with a standard deviation of 1.26 and an interquartile range of 2.7. Just as with the perceived influence of social media, the views of actual influence are very divergent.

Table 16: Actual influence of social media (n = 156)

	Items	M	SD
6.1	How much weight did you give to opinions viewed on social media	2.47	1.37
6.2	How much impact did social media have on your thinking about universities to attend	2.49	1.38
6.3	To what extent did social media influence the criteria you used for making your final decision	2.47	1.41
6.4	How much effect did the involvement of social media have on how the various options were rated	2.44	1.33
6.5	To what extent did social media influence others into adopting certain positions about the various options	2.49	1.30
6.6	How much did social media change your preferences	2.44	1.38
6.7	To what extent did you go along with suggestions on social media	2.32	1.30
6.8	To what extent did social media influence the decision you eventually reached	2.39	1.33
6.9	To what extent did the final decision reflect the views on social media	2.45	1.38
		2.47	1.26

Notes: Scale values range from 1 (Very small influence) to 5 (Very large influence); the higher a mean score, the more actual influence the respondent felt social media had over their decision making. *n* = number of respondents, *M* = mean, *SD* = standard deviation

Looking at the results, it can be determined that social media only has a slight actual influence on the decision-making process of students when selecting a university to attend.

6.3.7 SOCIAL MEDIA USAGE

A 16-item, 5-point Likert scale was used to measure social media usage in question 7. The items consisted of a number of activities that are engaged in on social media. The points were labelled from 1 (Never) to 5 (Always). A higher score indicates that the student engaged in this activity a lot on social media, whereas a lower score indicates that they did not engage in the activity often. The original scale contained three different factors that represented information-adding activities, information-seeking activities and entertainment activities. The descriptive statistics for these three factors of the social media usage scale can be seen in Table 17 on the next page.

Overall, respondents indicated that they made use more of entertainment activities on social media, with a mean of 3.02 (SD = 0.94). Information-seeking activities were in second place (M = 2.90; SD = 1.28), with information-adding activities in last place (M = 2.36; SD = 1.06). The most popular activities under each factor were to stay in touch with contacts (M = 3.38; SD = 1.11), to view pictures and videos (M = 3.38; SD = 1.12), to search for information about studies (M = 3.12; SD = 1.41) and to share opinions and views on forums (M = 2.76; SD = 1.34).

The least popular activities under each category were to make appointments with contacts (M = 2.54; SD = 1.26), to search for information about school (M = 2.66; SD = 1.44) and to subscribe to RSS feeds (M = 1.81; SD = 1.55).

Table 17: Social media usage – descriptive statistics (n = 156)

Items	M	SD
Total social media usage	2.70	0.95
Total entertainment	3.02	0.94
Stay in touch	3.38	1.11
View: Pictures and videos	3.38	1.12
Make appointments	2.54	1.26
Share: Pictures and videos	3.21	1.20
Search: new contacts	2.58	1.18
Total information seeking	2.90	1.28
Search: info about study	3.12	1.41
Search: Info about university	2.99	1.43
Search: Info about school	2.66	1.44
Read: Product reviews	2.81	1.38
Items	M	SD
Total information adding	2.36	1.06
Share: Opinions on forums	2.76	1.34
Review: Purchased products	2.58	1.36
Share: Experiences on blogs	2.09	1.26
Subscribe: RSS	1.81	1.15
Vote	2.23	1.30
Share information: sport/hobby	2.46	1.32
Share information: Universities	2.54	1.44

Notes: Scale values range from 1 (Never use) to 5 (Always use); the higher a mean score, the more the respondent used this activity on social media. *n* = number of respondents, *M* = mean, *SD* = standard deviation

The data suggests that social media plays an entertainment role in most students' lives by helping them stay in touch with contacts and allowing them to view pictures and videos online. There is also a slight inclination towards social media playing an information-seeking role.

6.3.7.1 Stay in touch with contacts

Figure 17 on the next page illustrates respondents' views on using social media to stay in touch with contacts. The data indicates that 32.7% (n = 51) of respondents sometimes

used social media for this purpose, 32.0% (n = 50) of respondents often used it to stay in touch with contacts and 16.0% (n = 25) always used social media to stay in touch with contacts. Only 19.3% (n = 30) of respondents rarely or never used social media for this activity.

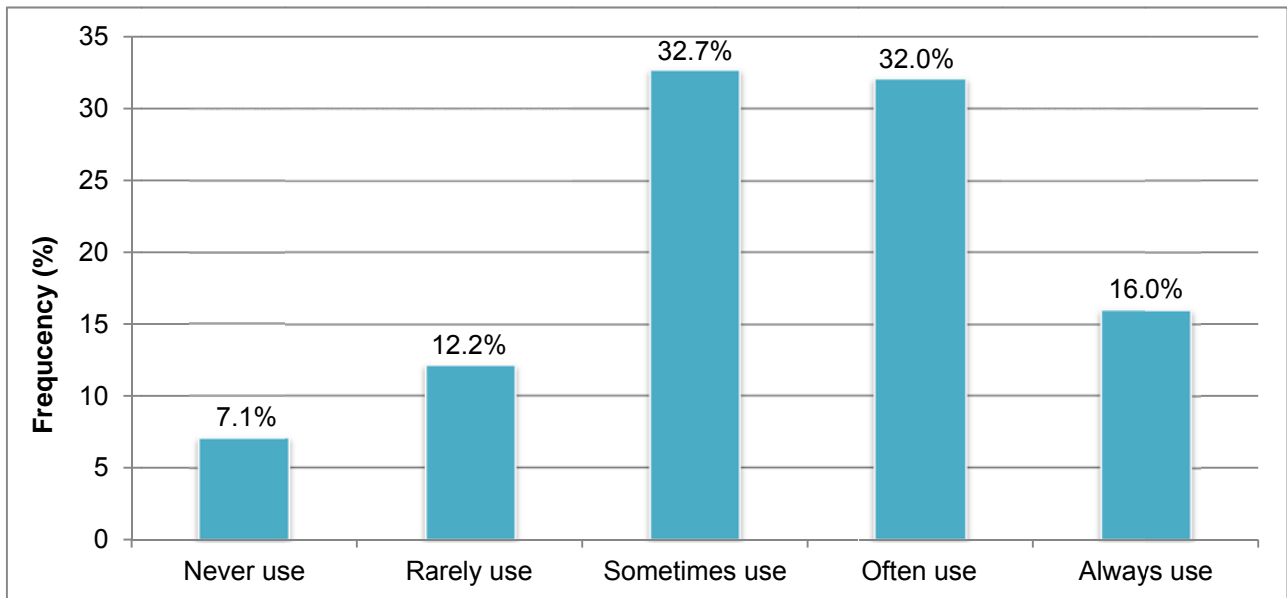


Figure 17: I use social media to stay in touch with contacts (n = 156)

Note: The total number of responses equal 100.1% due to software package calculation.

Staying in touch with contacts is an important activity on social media. Most students appear to use social media at some stage to stay in touch with contacts.

6.3.7.2 View pictures and videos

Figure 18 on the next page illustrates the respondents' use of social media for viewing pictures and videos. The majority of respondents (53.8%; n = 84) selected the often or always use options, whereas 20.5% (n = 32) of respondents selected rarely or never use and 25.6% (n = 40) of respondents sometimes used social media to view pictures and videos. This largely positive response suggests that respondents used social media to view pictures and videos.

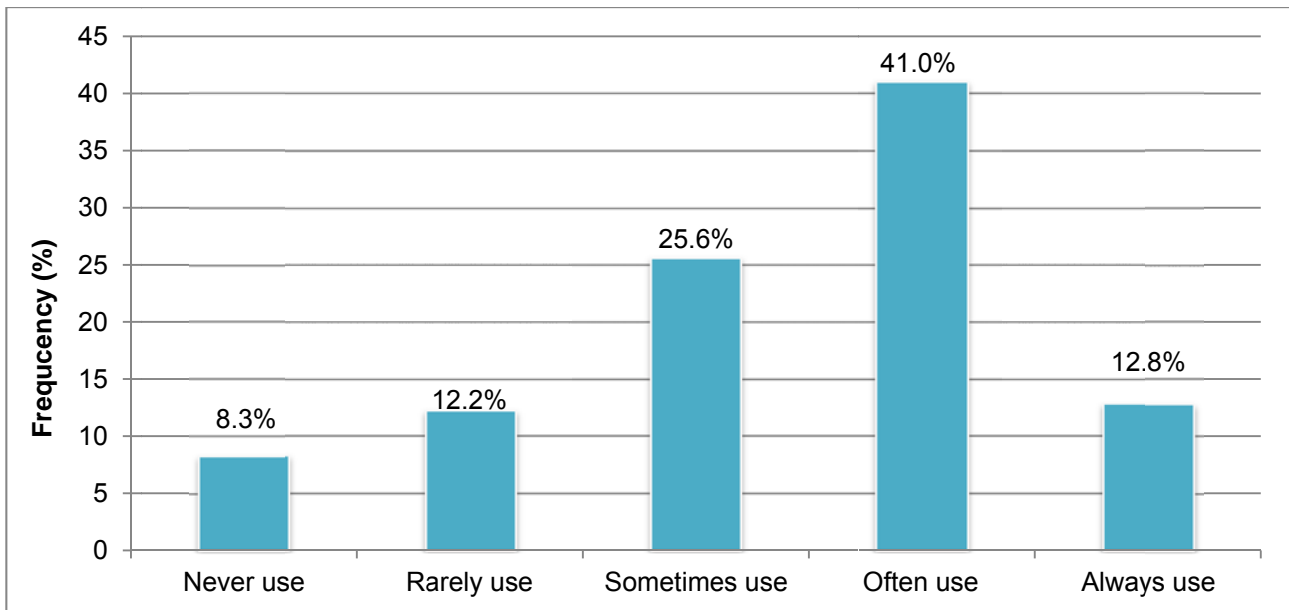


Figure 18: I use social media to view pictures and videos (n = 156)

Note: The total number of responses equal 99.9% due to software package calculation.

The data suggests that this is an important activity for students on social media. They appear to use social media often to view pictures and videos.

6.3.7.3 Make appointments with contacts

Figure 19 on the next page illustrates respondents' views on using social media to make appointments with contacts. The majority of respondents (53.8%; n = 84) selected the rarely use or never use options and only 26.3% (n = 41) of respondents indicated that they often or always used social media to make appointments with contacts. There were 19.9% (n = 31) of the respondents that sometimes used social media for this purpose. This largely negative response suggests that respondents did not use social media to make appointments with contacts.

This is not an important activity for students to do on social media. Most seem to rarely use social media platforms to make appointments with contacts.

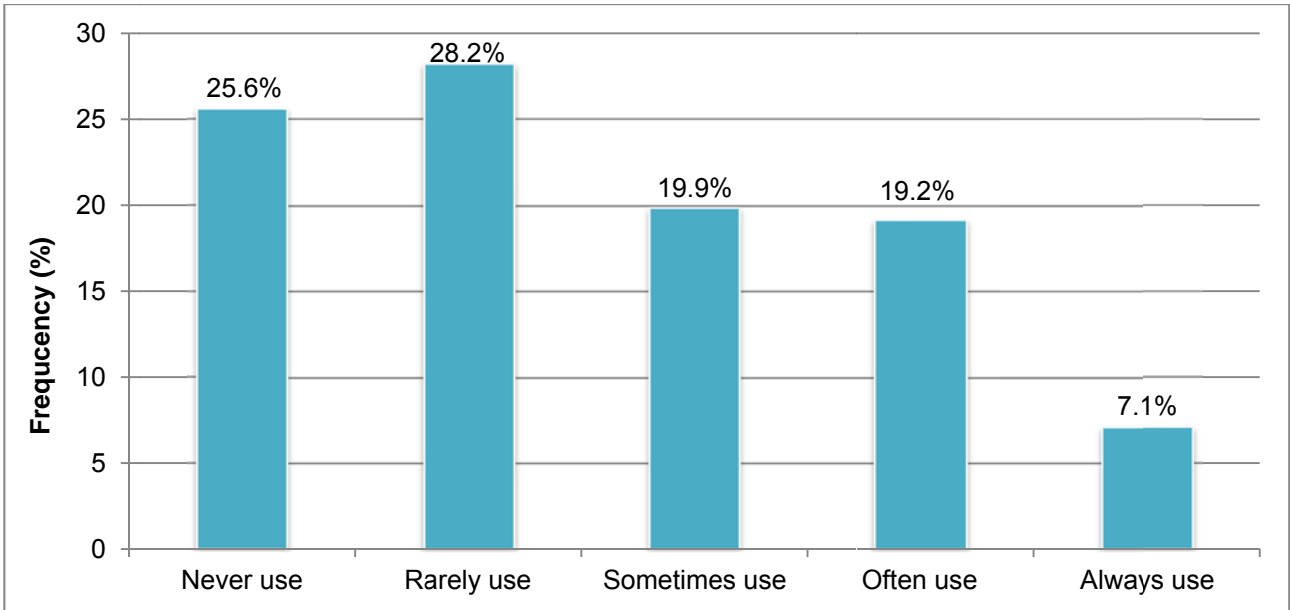


Figure 19: I use social media to make appointments with contacts (n = 156)

6.3.7.4 Share pictures and videos

Figure 20 below shows that 44.9% (n = 70) of respondents often or always used social media to share pictures and videos. A further 28.8% (n = 45) sometimes did so, and the remaining 26.2% (n = 41) never or rarely used social media to share pictures and videos. This suggests that respondents used social media to share pictures and videos.

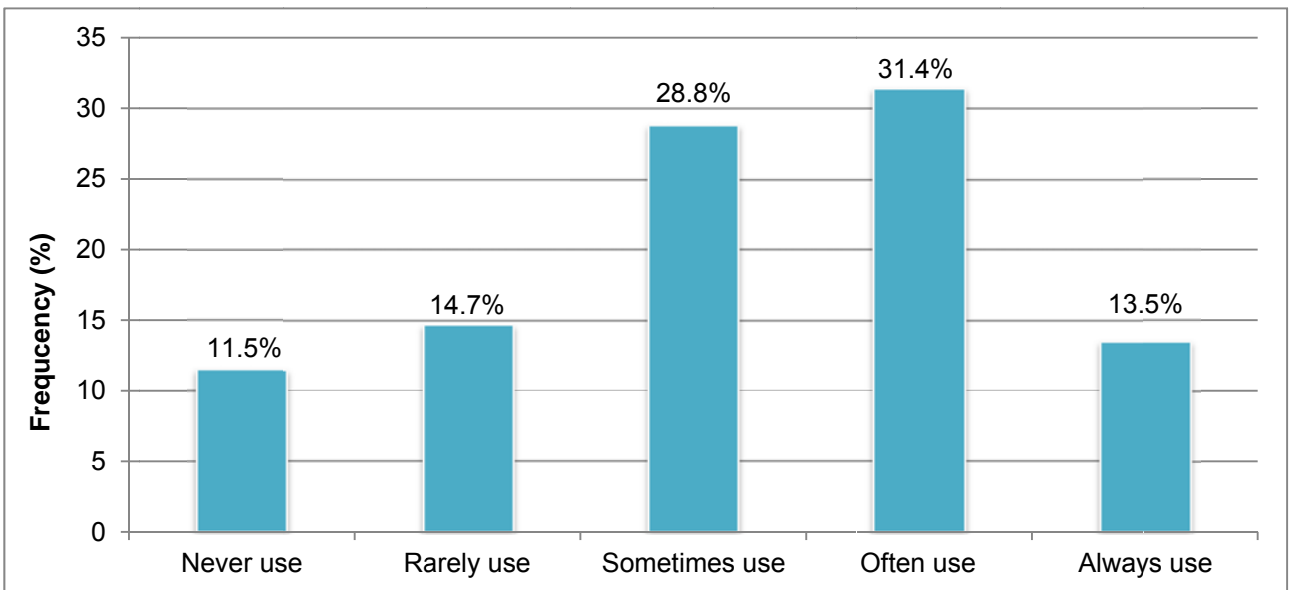


Figure 20: I use social media to share pictures and videos (n = 156)

Note: The total number of responses equal 99.9% due to software package calculation.

This appears to be an important activity on social media as students often share pictures and videos on social media.

6.3.7.5 Search for new contacts

As shown in Figure 21 below, 50% (n = 78) of respondents never or rarely used social media to search for new contacts, while 21.8% (n = 34) of respondents often or always used it for this activity. A further 28.2% (n = 44) sometimes used social media to search for new contacts. The data suggests that students do use social media as an avenue to search for new contacts, but it is not clear if this is largely positive or negative.

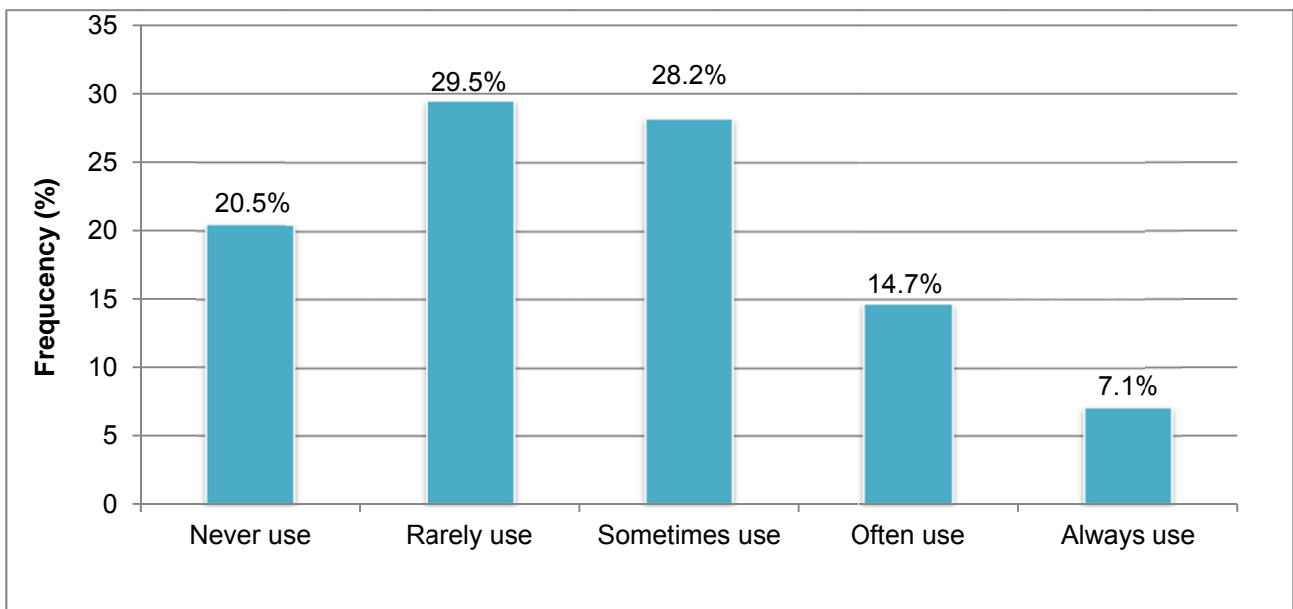


Figure 21: I use social media to search for new contacts (n = 156)

This activity appears to be one that most students only rarely use, if ever, but some respondents did use social media to search for new contacts.

6.3.7.6 Search for information about study

Figure 22 on the next page illustrates respondents' views on using social media to search for information about studying. Some 32.7% (n = 51) of respondents selected the rarely use or never use options and 43.6% (n = 72) indicated that they often or always used

social media to search for information about studying. 23.7% (n = 37) of the respondents sometimes used social media for this purpose.

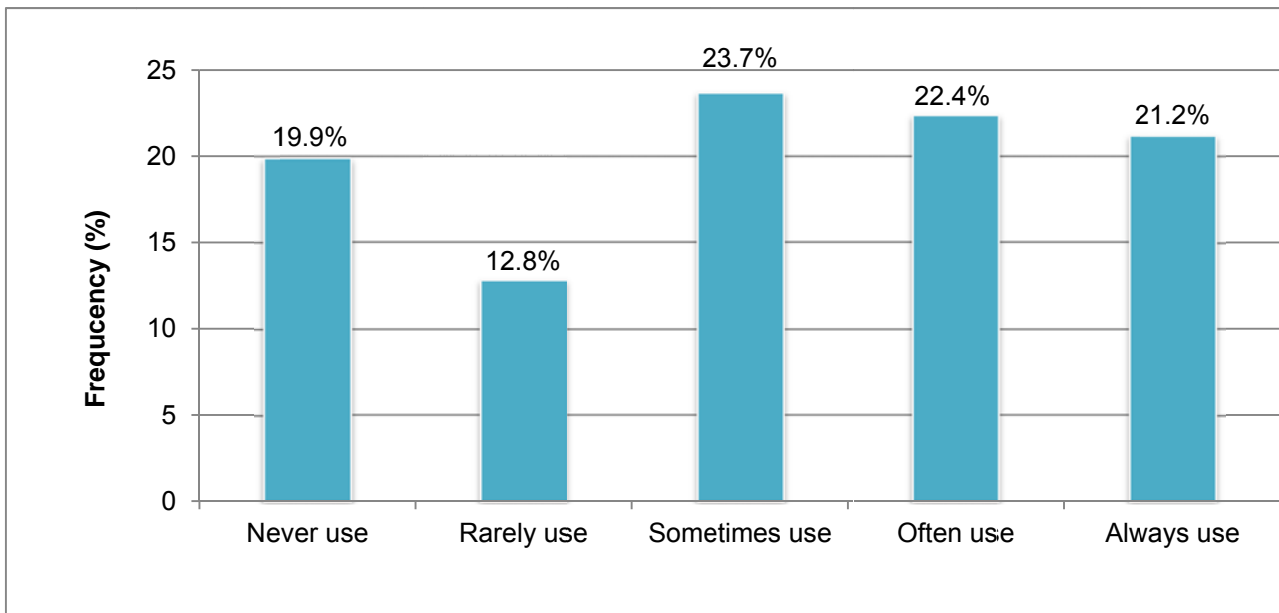


Figure 22: I use social media to search for information about studies (n = 156)

Interestingly, the data suggests that students use social media to search for information about studies.

6.3.7.7 Search for information about university

Figure 23 on the next page shows that 40.4% (n = 63) of respondents often or always used social media to search for information about universities. A further 23.1% (n = 36) sometimes used it for this purpose. The remaining 36.6% (n = 57) never or rarely used social media to search for information about universities.

One of the activities that students appear to do more often is look for information about the university on social media.

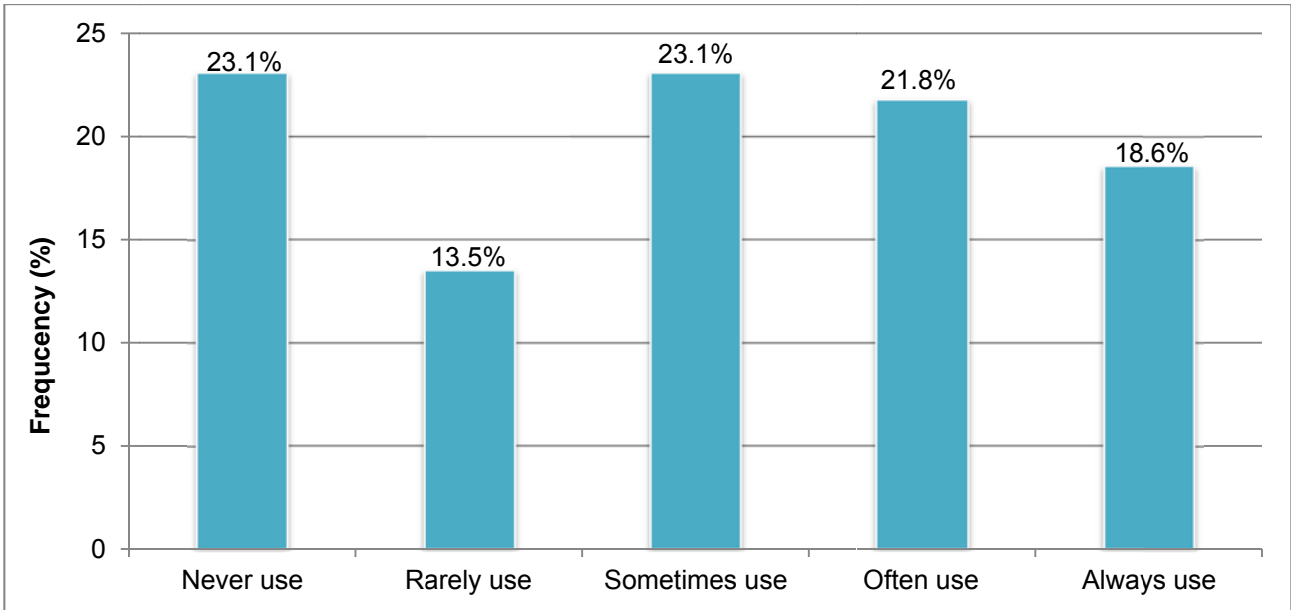


Figure 23: I use social media to search for information about university (n = 156)

Note: The total number of responses equal 100.1% due to software package calculation.

6.3.7.8 Search for information about school

Figure 24 below illustrates that 34% (n = 53) of respondents often or always used social media to search about school. An additional 16.7% (n = 26) sometimes used social media for this and 49.3% (n = 77) never or rarely used social media to search for information about school.

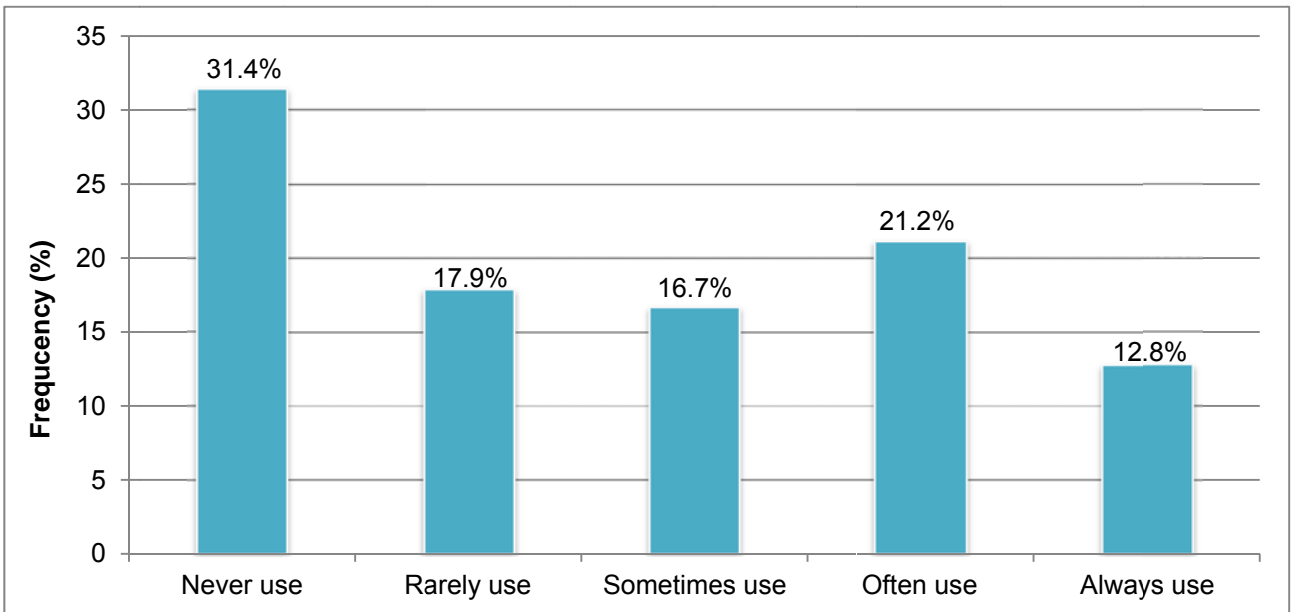


Figure 24: I use social media to search for information about school (n = 156)

As these students have already left school, they tend to never use social media to look for information about school. However, they may want to see how their alma mater is doing and therefore use social media to check in from time to time as some respondents did indicate that they used social media for this activity.

6.3.7.9 Read product reviews before purchase

There were 45.5% (n = 71) of respondents who never or rarely read product reviews before purchase on social media. A further 19.9% (n = 31) sometimes used social media for this activity and 34.6% (n = 54) often or always read product reviews on social media before they made a purchase. This can be seen in Figure 25 below.

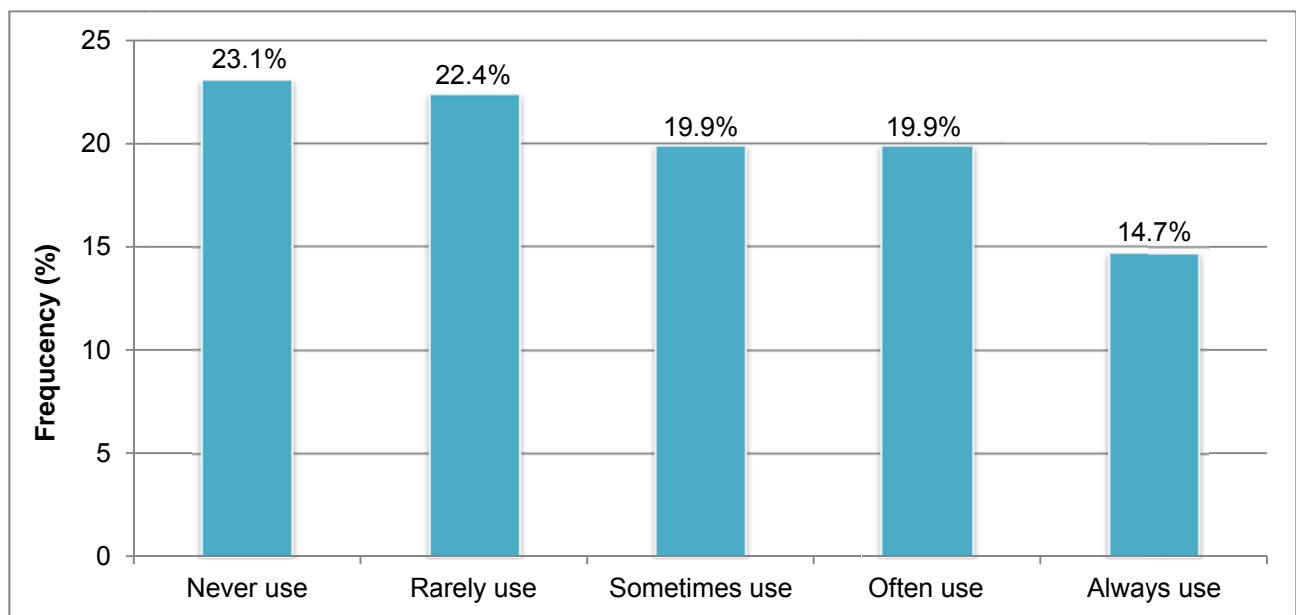


Figure 25: I use social media to read product reviews before purchase (n = 156)

This statement received a consistent response across all of the categories. Although it tended more towards never use, a lot of the students surveyed indicated that they did use social media for reviews. It is difficult to take a stand on this statement as the findings are very diverse.

6.3.7.10 Share opinions through forums

In Figure 26 below it can be seen that 46.1% (n = 72) of respondents never or rarely shared opinions through forums on social media. 21.8% (n = 34) sometimes used social media for this activity and 32% (n = 50) of respondents often or always used social media to share opinions through forums.

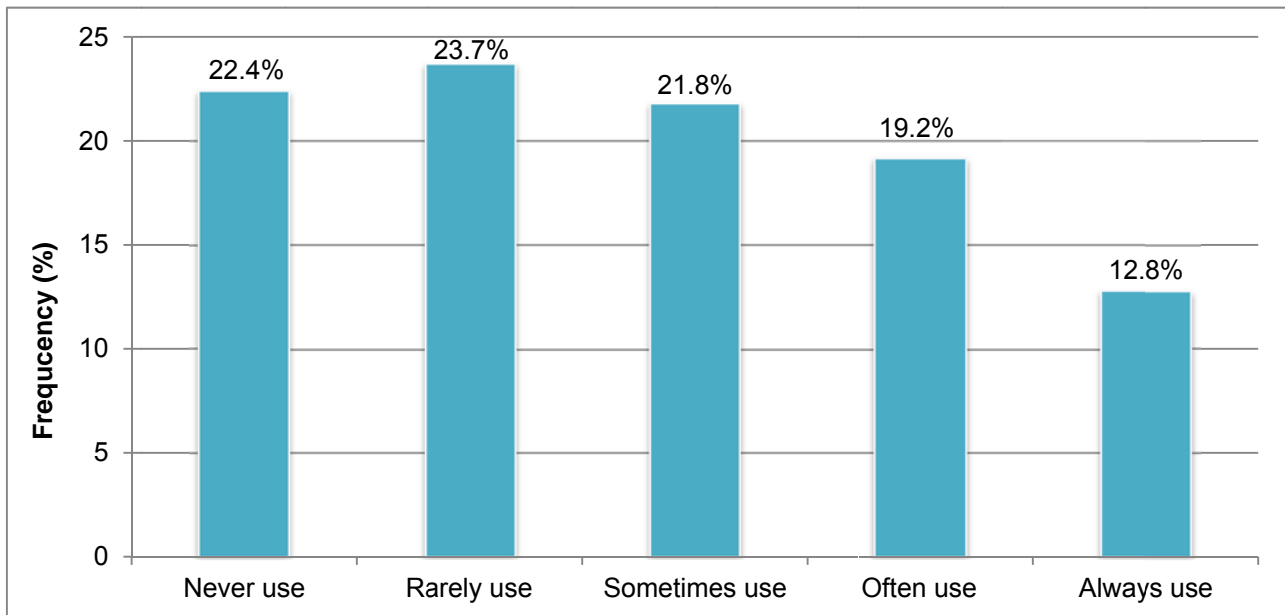


Figure 26: I share opinions through forums on social media (n = 156)

Note: The total number of responses equal 99.9% due to software package calculation.

A very diverse set of answers was received here. It therefore cannot be said whether the finding is positive or negative.

6.3.7.11 Review purchased products

Many of the respondents (49.3%; n = 77) indicated that they never or rarely used social media to review purchased products. A further 21.8% (n = 34) sometimes used it for this purpose and the remaining 28.8% (n = 45) often or always used social media to review purchased products. This can be seen in Figure 27 on the next page.

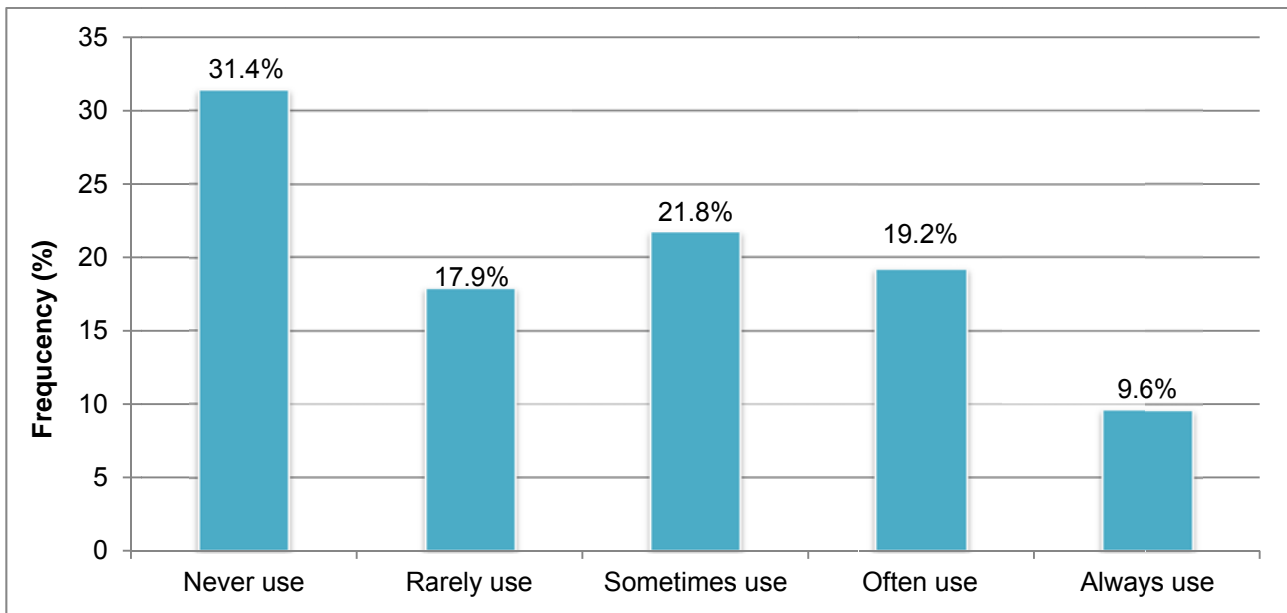


Figure 27: I use social media to review purchased products (n = 156)

Note: The total number of responses equal 99.9% due to software package calculation.

The views on using social media to review purchased products are very divergent. Although the majority indicated that they did sometimes use social media to review purchased products, a large portion of the respondents never used it for this purpose.

6.3.7.12 Share experiences through blogs

Only 16.7% (n = 26) of respondents indicated that they often or always used blogs to share experiences. A further 16.7% (n = 26) sometimes did so, but the majority of respondents (66.7%; n = 104) rarely or never used blogs to share experiences (Figure 28 on the next page).

Students seem to rarely make use of sharing experiences through blogs. This is a good indication that universities should not invest time in blogs as students do not seem to deem this as an important social media activity.

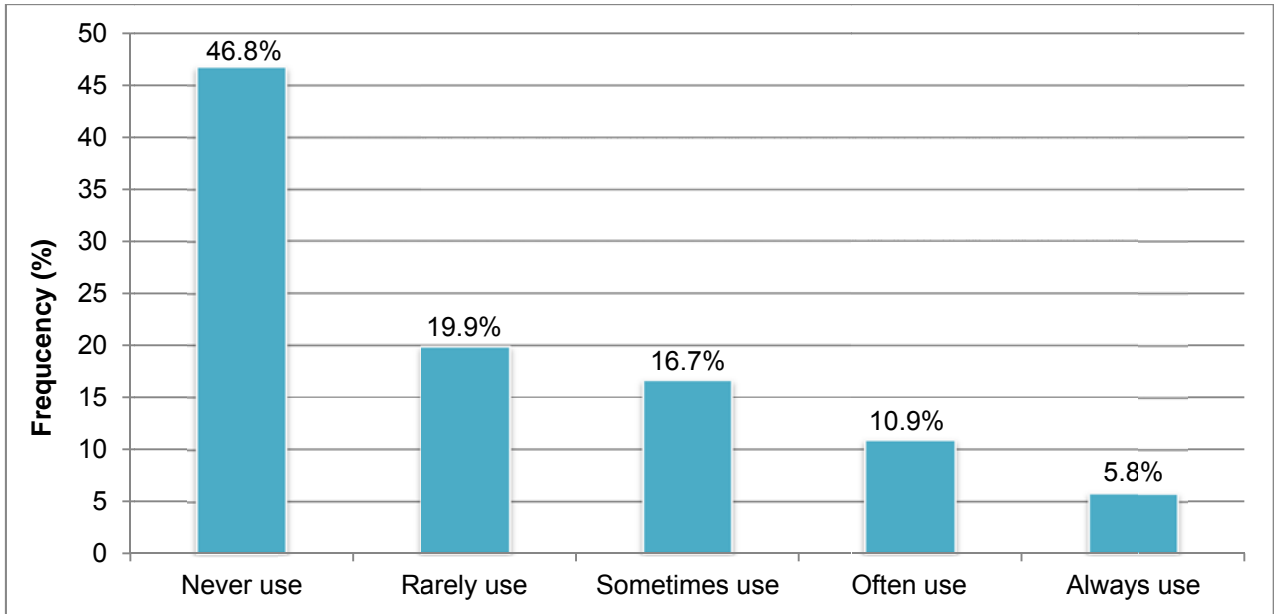


Figure 28: I share experiences through blogs (n = 156)

Note: The total number of responses equal 100.1% due to software package calculation.

6.3.7.13 Subscribe to RSS feeds

Respondents generally did not subscribe to RSS feeds, with 75.6% (n = 118) indicating that they rarely or never used social media for this activity. Only 10.8% (n = 17) often or always used social media to subscribe to RSS feeds. A further 13.5% (n = 21) indicated that they sometimes used it for this purpose. This can be seen in Figure 29 below.

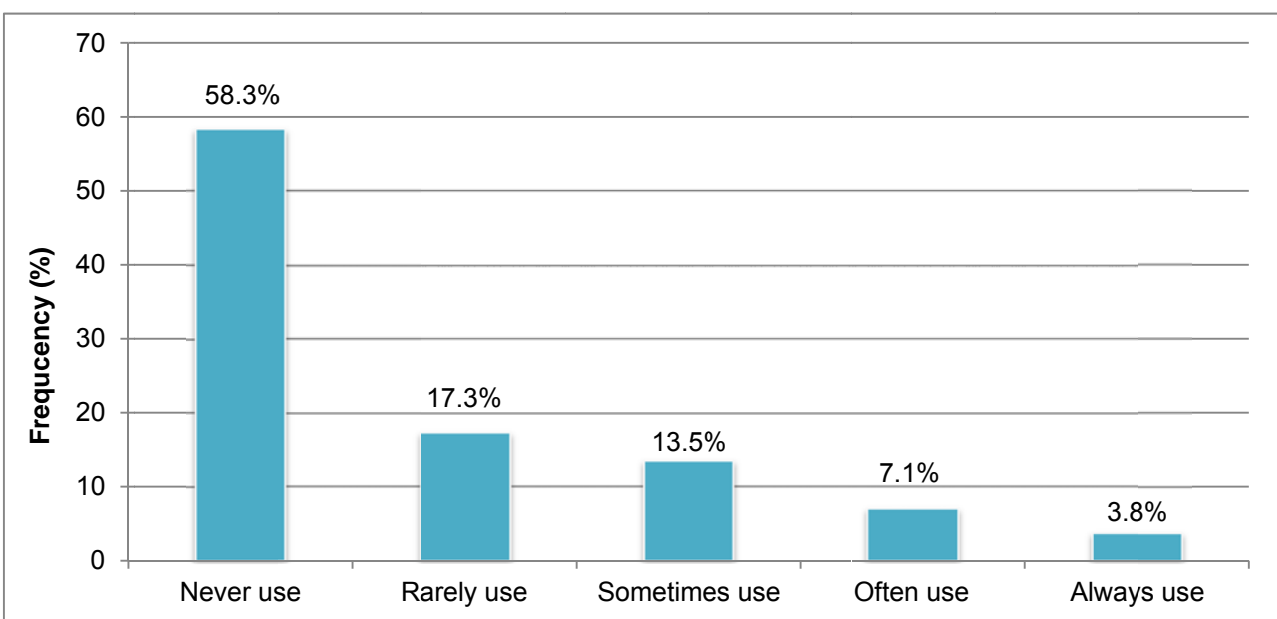


Figure 29: Subscribe to RSS feeds (n = 156)

The same applies for RSS feeds as for blogs. The option is there for students to subscribe to the RSS feed, but the majority appear never to use it. RSS is a very useful tool. It might be that students do not know how it works and if training on it is provided, they might utilise it more often.

6.3.7.14 Vote in polls

In Figure 30 below, only 17.9% (n = 28) of respondents indicated that they often or always used social media to vote in polls. A further 19.9% (n = 31) sometimes used social media for this activity. The majority of respondents (62.2%; n = 97) rarely or never did so.

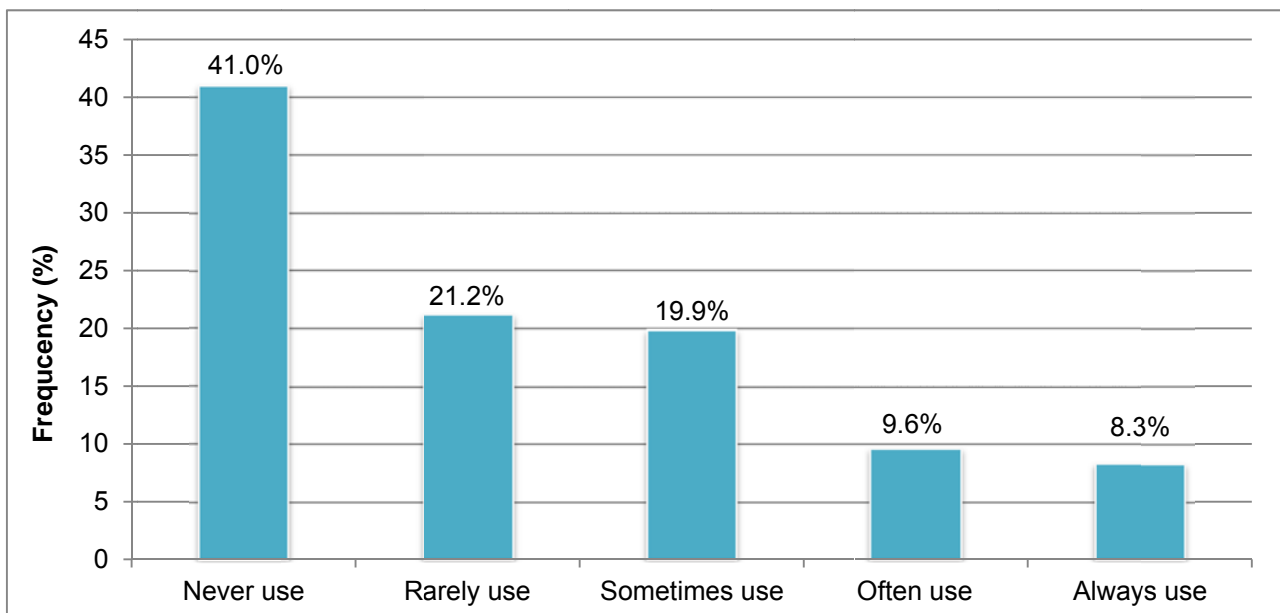


Figure 30: I use social media to vote in polls (n = 156)

Universities can use polls to ask students about their experience or courses, although not too much effort should be put into polls as students appear to rarely, if ever, use it.

6.3.7.15 Share information about sport or hobby

Figure 31 on the next page shows that 54.5% (n = 85) of respondents never or rarely used social media to share information about sport or hobbies. The remaining 45.5% (n = 71) of respondents are distributed between sometimes, often and always, with the majority of this

group (20.5%; n = 32) indicating that they only sometimes used social media for this activity.

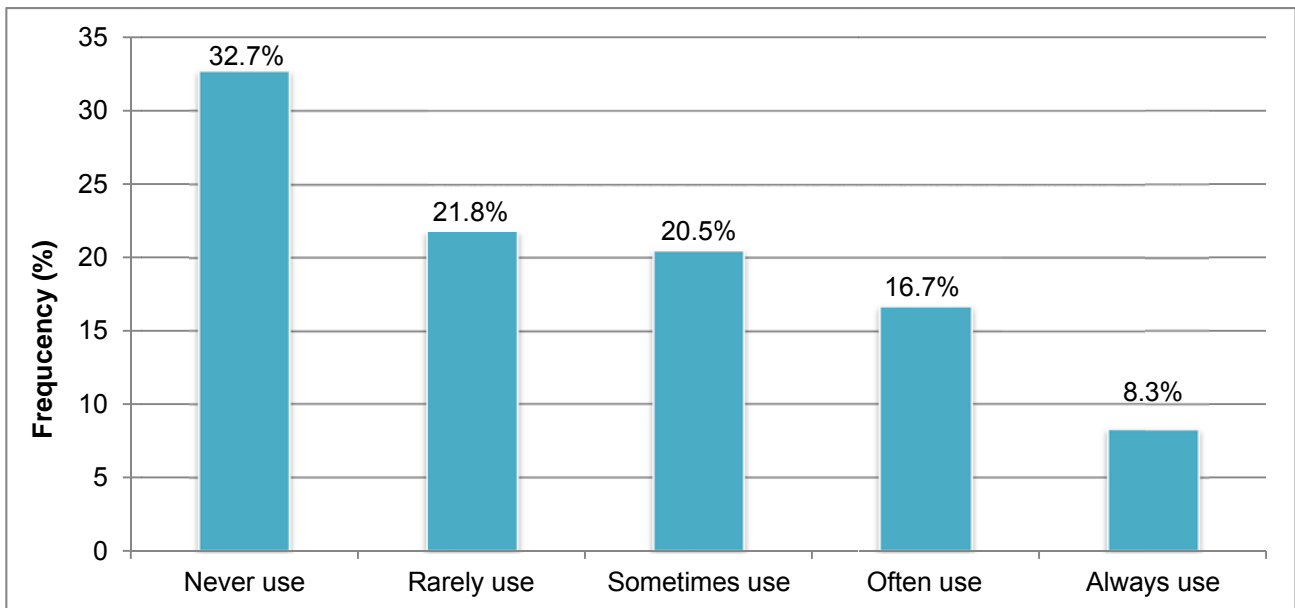


Figure 31: I share information about sport or hobbies on social media (n = 156)

As some students share information about sport and hobbies, universities can look at creating posts that are relevant to the sport and hobbies that their students tend to engage in. Due to the fact that Unisa is a distance learning institution, this might not be a viable avenue as it does not compete in sport.

6.3.7.16 Share information about universities

Figure 32 on the next page indicate that the majority of respondents (52.6%; n = 82) never or rarely used social media to share information about universities. There were, however, some respondents (30.3%; n = 48) who often or always used it for this purpose. 16.7% (n = 26) of respondents sometimes did so.

Some students (47.5%) indicated that they sometimes, often or always used social media to share information about universities, which means that there is an opportunity for universities to utilise social media to reach students with their marketing message. Universities need to look at the content that they are currently placing on social media and determine why students do not share the information. If more captivating information is placed on social media, students might be more inclined to share such information.

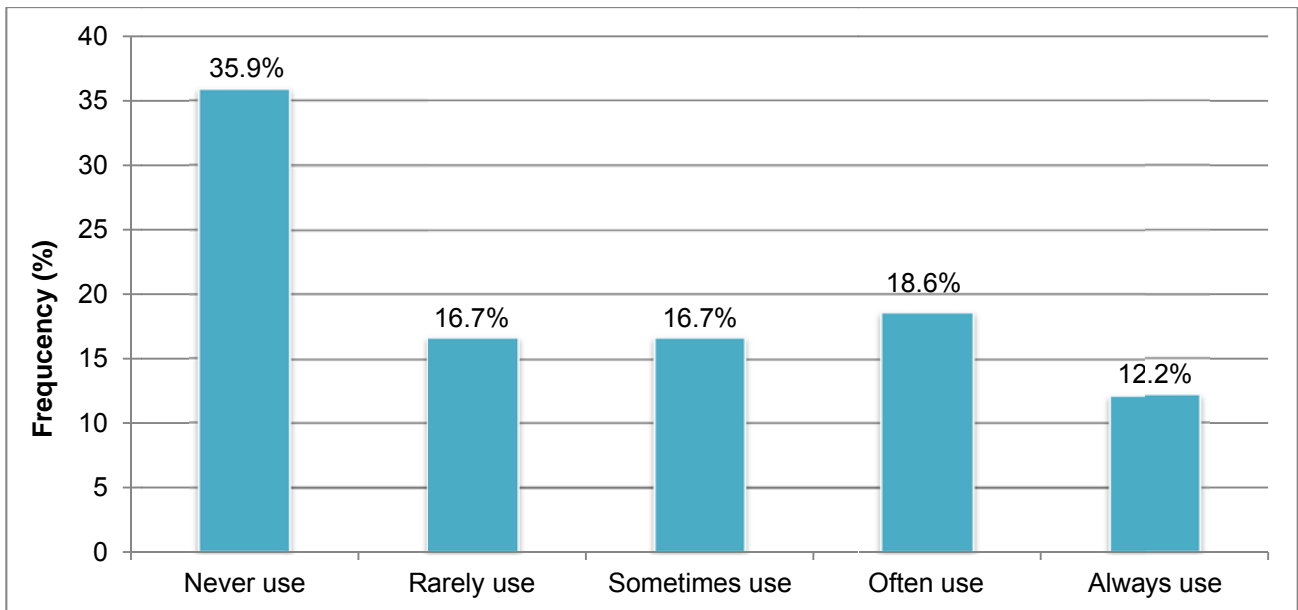


Figure 32: I share information about universities on social media (n = 156)

Note: The total number of responses equal 100.1% due to software package calculation.

6.3.8 SOCIAL MEDIA USAGE IN DIFFERENT AGE CATEGORIES

Table 18 on the next page illustrates the differences in social media usage between respondents 31 years and older and respondents 18 - 30 years old. Respondents 18 - 30 years of age mostly used social media for entertainment purposes. The reported mean score is 3.01 (SD = 0.88). The mean is slightly dispersed, which could indicate that respondents had slightly different views on their usage of social media. The average view was that respondents 18 - 30 years old made use of social media for entertainment purposes.

Respondents aged 31 years and older used social media as an information-seeking platform. The reported mean score is 3.10 (SD = 1.33). The mean is widely dispersed, which could indicate that respondents had very different views on their usage of social media. The average view was that respondents 31 years and older mostly made use of social media for information-seeking activities.

The least popular social media usage in both groups was information-adding activities (M = 2.31; SD = 1.092 and M = 2.42; SD = 1.019).

Table 18: Differences in social media usage between age groups (n = 155)

	n	Total entertainment		Total information seeking		Total information adding	
		m	SD	m	SD	m	SD
18 - 30 years	82	3.01	0.876	2.72	1.214	2.31	1.092
31 years and older	73	3.04	1.009	3.10	1.331	2.42	1.019
Total	155	3.02	0.938	2.90	1.280	2.36	1.056

Taking the above discussion into consideration, students 18 - 30 years appear to be looking for entertainment on social media. They enjoy activities such as viewing and sharing pictures and videos, looking for new contacts and staying in touch with contacts. On the other hand, students 31 years and older enjoy information-seeking activities on social media more than entertainment. They like to search for different types of information on social media and even read product reviews. From this it is clear that in order to capture the attention of these two different age groups on social media, universities will need to make use of different types of strategies. One missing response generated (see page 171 of Annexure D).

6.3.9 NUMBER OF TIMES STUDENTS ACCESS SOCIAL MEDIA PER DAY

In question 8, respondents were asked to indicate how many times per day they accessed social media. They were provided with options ranging from none to more than 10 times per day. The results can be seen in Figure 33 below.

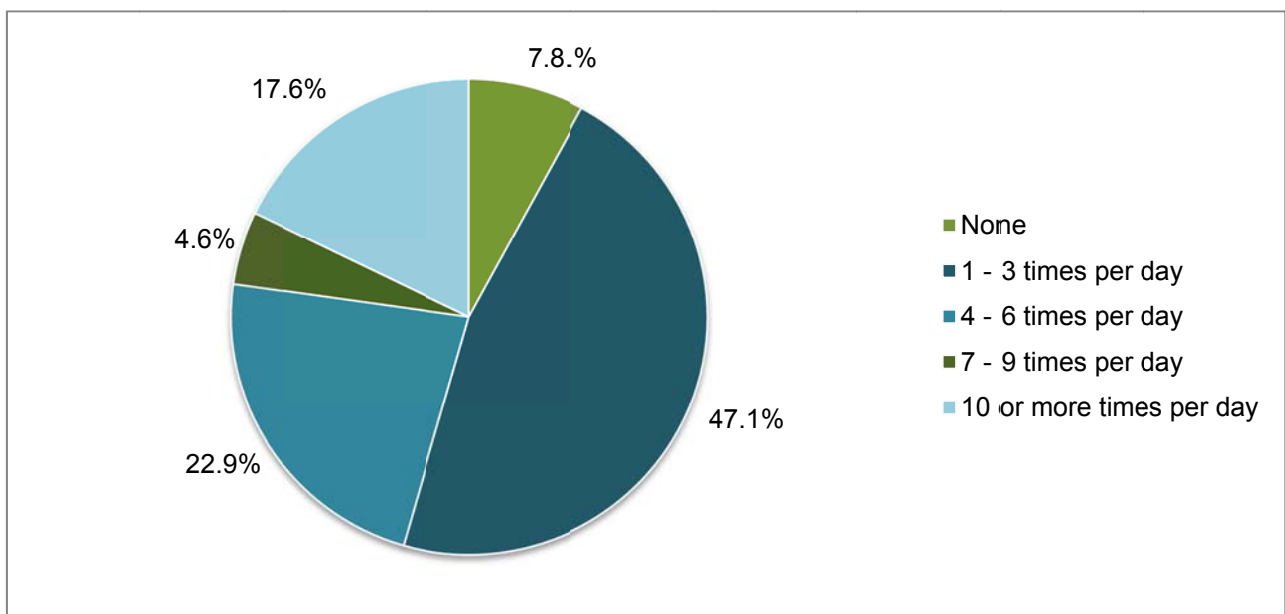


Figure 33: Number of times social media is accessed in a day (n = 153)

The majority of the respondents accessed social media between 1 and 3 times per day (47.1%; n = 72). There were 35 respondents (22.9%) who accessed social media 4 – 6 times a day and 27 respondents (17.6%) did so more than 10 times a day. Only 7.7% (n = 12) of respondents indicated that they did not access social media and 3 respondents did not answer the question. The data suggests that 90.3% of respondents accessed social media on a daily basis. There were 3 respondents that did not answer the question.

Taking the above discussion into consideration the data suggests that about most students access social media 1 – 6 times per day. This is 1 – 6 potential contact points that universities have with their target market per day.

6.3.10 HOURS A DAY STUDENTS SPEND ON SOCIAL MEDIA

In question 9, respondents were asked how many hours per day they spent on social media. This ranged from no time to more than 10 hours per day. The results can be seen in Figure 34 below. The data suggests that the majority of the respondents spent between 1 and 3 hours per day on social media, with 107 respondents (69.5%) selecting this option. 16 respondents (11.0%) spent 4 – 6 hours a day on social media. There were 2 respondents that did not answer the question.

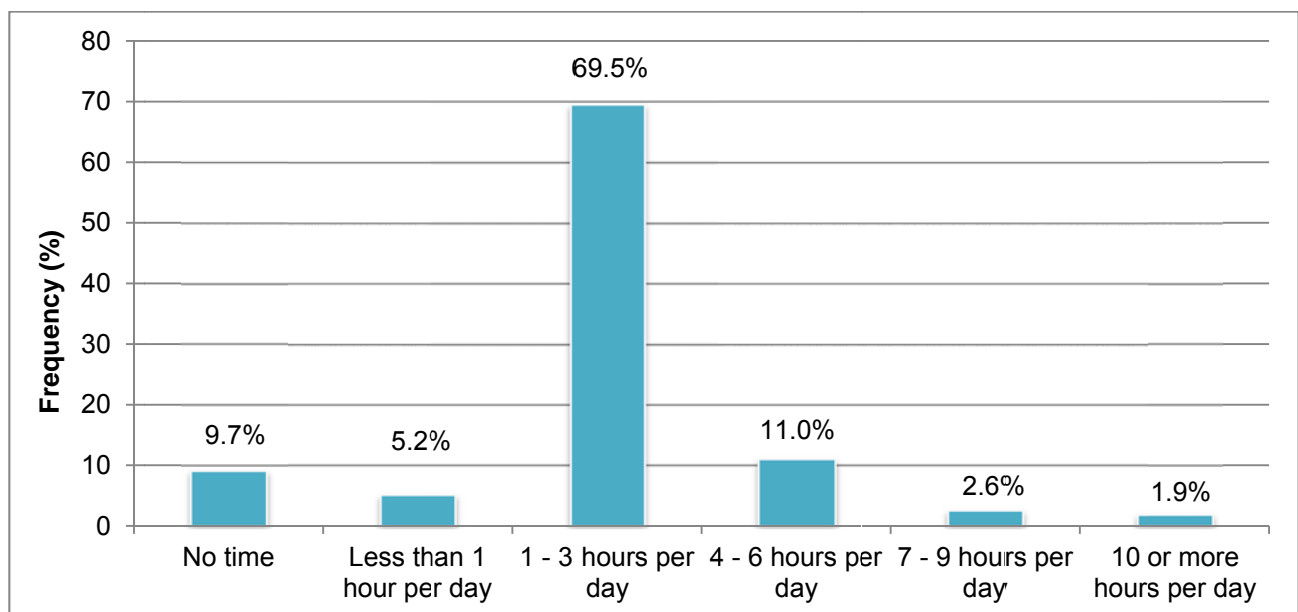


Figure 34: Hours spent per day on social media (n = 154)

Note: The total number of responses equal 99.9% due to software package calculation.

It is safe to assume that students spend 1 – 3 hours per day on social media. Universities thus know where their target audience is for 1 – 3 hours of the day. There is, however, a lot of clutter on social media, so the information or message that universities put out there needs to captivate the market. If universities can develop a captivating message that students will want to share, they can reach their target audience using social media.

6.3.11 DEVICES STUDENTS USE TO ACCESS SOCIAL MEDIA

Respondents were asked to indicate which devices they used to access social media (Question 10). The majority used their cellphones to access social media, with 130 respondents (83.3%) selecting this option. The second most popular device used for social media access was personal computers (62.2%; n = 97), followed by work computers, with 51 respondents selecting this option (32.7%). The results can be seen in Figure 35 below.

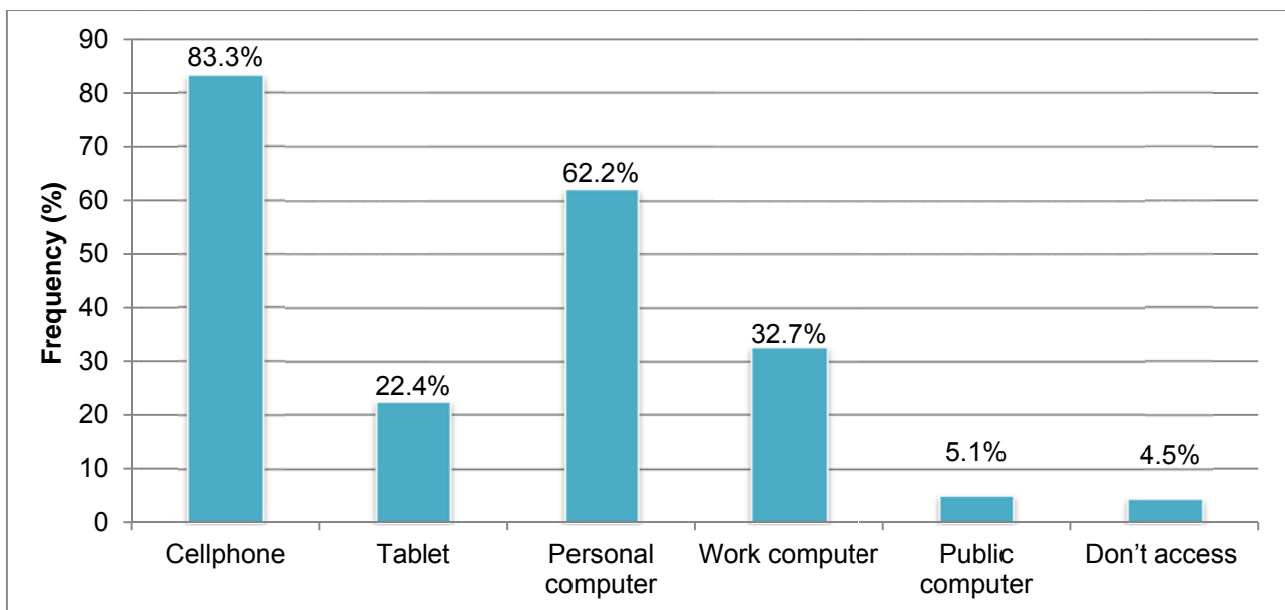


Figure 35: Devices used to access social media (n = 156)

Notes: The total number of response will not be equal to n and the percentages will not add up 100 as it was a multiple-choice, multiple-response question. The percentage was calculated by dividing frequency count by n.

As can be seen from the results, the majority of students appear to access social media by cellphone. It can be assumed that it would be beneficial for universities to make sure that any content that they put on social media is optimised for use on a cellphone. In order to access social media via a cellphone, it must be a smartphone, which means that

universities can also consider other avenues like creating an app with all the information that prospective students need when doing research on which university to attend.

6.4 INFERENCE STATISTICS

Inferential statistics was used to investigate the difference between perceived influence and actual influence and social media usage in different age categories. Inferential statistics are all included in Annexure E.

6.4.1 PERCEIVED INFLUENCE VS ACTUAL INFLUENCE

The comparison between the perceived and actual influence of social media in selecting a university is reported below. The following box plots of perceived and actual influence experienced of social media communication in selecting a university are very similar, as can be seen from the parameters of the two constructs in Figure 36 below.

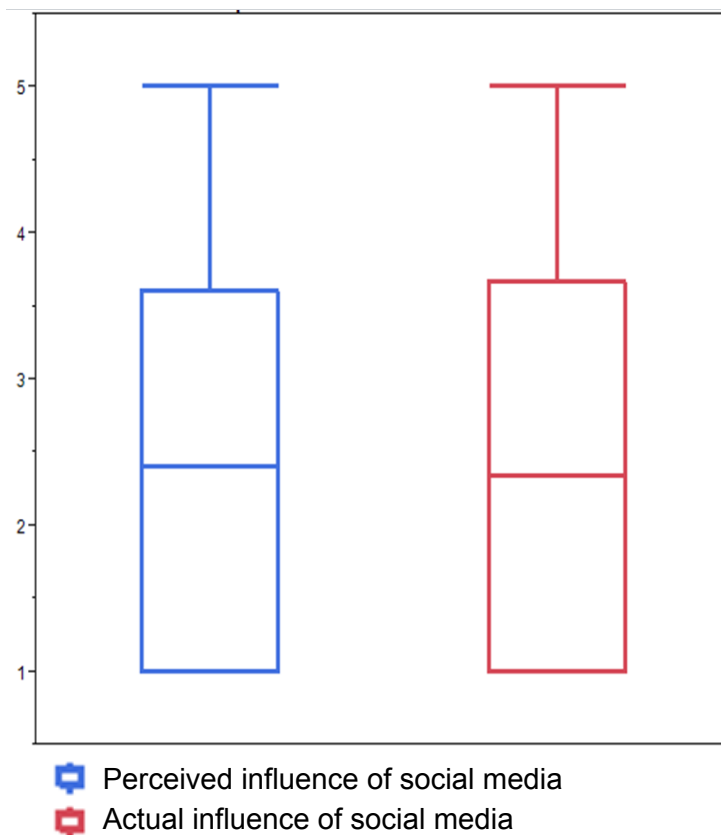


Figure 36: Perceived and actual influence of social media in selecting a university

There is thus no difference between the perceived and actual influence of social media on the selection of a university. The relationship between the construct of perceived and actual influence was further investigated with a correlation analysis between the two constructs, as can be seen in Table 19.

Table 19: Relationship between perceived and actual influence (n = 156)

Construct	Perceived influence	Actual influence
Perceived influence of social media communication	1	0.9251
Actual influence of social media communication	0.9251	1

The linear relation between perceived and actual influence is **very strong**, as can be seen with a correlation coefficient of 0.9251. This can also be seen with a scatter plot matrix of the scores of the constructs.

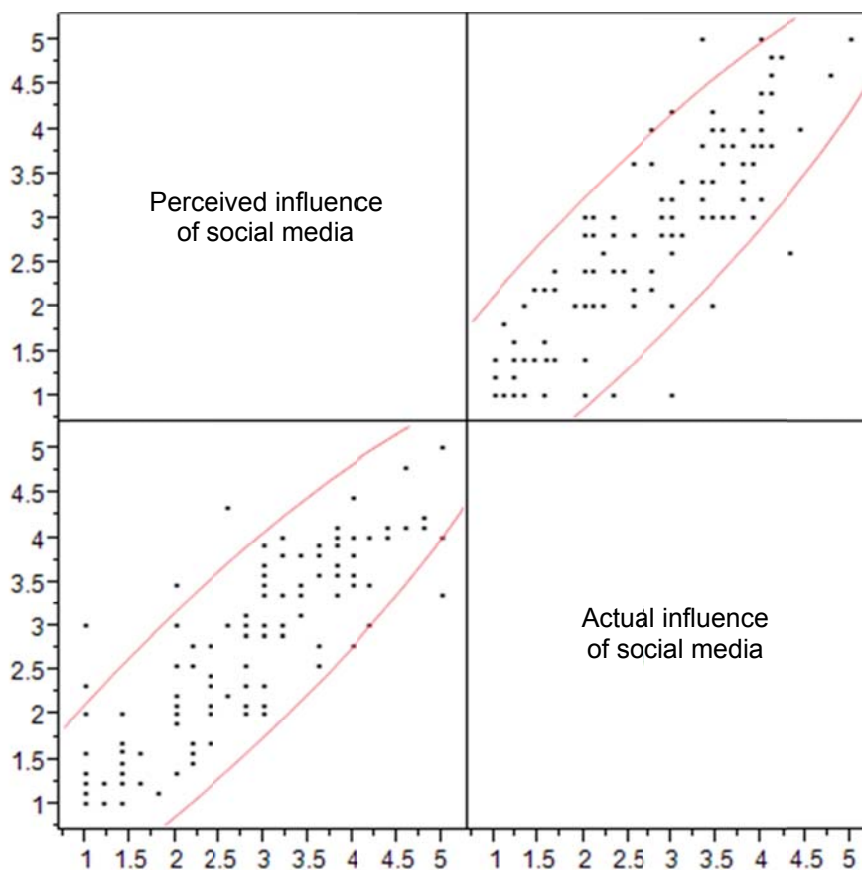


Figure 37: Scatter plot matrix: Perceived and actual influence of social media

This indicates that there is no real difference between perceived influence and actual influence of social media in respondents answers. Thus it can be concluded that social media only has a slight overall influence on students' decision making process when selecting a university to attend. This slight influence is however not significant enough to come to a conclusion that social media influences student decision making when it comes to selecting a university to attend.

6.4.2 SOCIAL MEDIA USAGE (QUESTION 7)

To gain better insight into the use of social media, it was decided to investigate if there was a difference in social media usage between students aged 18 – 30 years and students 31 years and older. Although no formal hypothesis was stated in the study, the same method was used to investigate the difference in social media usage between the two groups. For the purpose of statistical analysis the following hypothesis was formulated:

- H_{1(null)}: There is no difference in the usage of social media across different age groups.
- H_{1(alt)}: Students from different age groups differ regarding the way in which they use social media.

As this is a hypothesis that is comparing two groups on the same interval variable, the parametric two-sample t-test was identified as a possible hypothesis test. There are, however, three assumptions that need to be true for the parametric test to be done. If the data violates these assumptions, it will not be able to test the hypothesis at a parametric level and it will need to be tested at a non-parametric level, which will be the Mann-Whitney U test (also known as the Wilcoxon rank sum test). The level of significance against which the results of the hypothesis was tested is $\alpha = 0.05$.

The descriptive statistics for different age groups were developed and can be seen in Table 20 on the next page.

Table 20: Descriptive statistics of the perceived credibility of social media variable on different age groups

Age group	<i>n</i>	<i>M</i>	<i>SD</i>	Median
18 – 30 years old	82	2.63	0.103	2.47
31 years and older	73	2.78	0.113	2.69

From the table, the descriptive statistics clearly suggest that there is not a significant difference between social media usage of students aged 18 – 30 years ($M = 2.63$; $SD = 0.103$) and students 31 years and older ($M = 2.78$; $SD = 0.113$). The standard deviation indicates that there was no consensus in these age groups regarding social media usage.

In order to see if the parametric test could be used, a test needed to be done to test the assumption of normality. The statistical tests for assumption of normality are explained by looking at the results of the Kolmogorov-Smirnov (KS) and Shapiro-Wilk tests for normality. Since each age group had more than 50 respondents, the KS test was used to interpret the results and can be seen in the table below.

Table 21: Kolmogorov-Smirnov test for normality

Age group	Kolmogorov-Smirnov		
	Statistic	df	Sig
18 – 30 years old	0.086	82	0.200
31 years and older	0.069	73	0.200

The p-value of the KS test is significant; if the p-value is smaller than 0.05, it means that the test variable has a non-normal distribution in that group. The p-value for students 18 – 30 years old is 0.200 and for students 31 years and older it is 0.200. Both p-values are greater than 0.05, which means that the groups have a normal distribution. This is supported by the graphical tests for the assumption of normality, which clearly show that the social media usage variable has a normal distribution in both of the two age sub-groups. From this it is concluded that the independent sample t-test (parametric test) was appropriate as assumption of normality was normal.

The relevant parametric test was thus used to test the hypothesis; in this case the assumption of normality had already been dealt with and equal variances were then tested using Levene's test for equality of variances. Levene's test tests the null hypothesis that

the test variable (total social media usage) has equal variances in the two groups being compared. If the p-value of Levene’s test for equality was less than 0.05, the assumption of equal variances would be rejected.

Table 22: Parametric hypothesis test

	Levene’s Test for Equality of Variances		t-test for Equality of Means					
	F	Sig	t	df	Sig. (2-tailed)	Std Error Difference	95% Confidence Interval of the Difference	
							Lower	Upper
Equal variances assumed	0.166	0.684	-0.983	153.000	0.327	0.15236	-0.45072	0.15127
Equal variances not assumed			-0.981	149.540	0.328	0.15267	-0.45140	0.15195

The p-value of Levene’s test for equality of variances is 0.684. Since this value is greater than 0.05, the null hypothesis of equal variance cannot be rejected. The conclusion therefore has to be that the variance of the total social media usage variable in the students aged 18 – 30 years old is the same as that in the students 31 years and older. Consequently, the results of the t-test which appear in the first row of the independent samples test output table just below the column headings have to be considered. The p-value of the t-test (equal variances assumed) is 0.327. This, however, is a two-tailed p-value and a one-tailed hypothesis was formulated. As a result, the one-tailed p-value has to be calculated. Thus the one-tailed p-value is $1 - (0.327/2) = 0.8365$.

Since this is not less than 0.05, the null hypothesis of equal group means cannot be rejected. It is thus concluded that in this study, students 18 – 30 years and students 31 years and older do not differ significantly in their social media usage as measured by the social media usage scale.

6.5 RELIABILITY

Reliability refers to the degree to which consistent results are produced by an instrument when measurement is repeated (Malhotra, 2010:318). Internal reliability is tested with a

technique called item analysis which produces Cronbach's alpha (Wiid & Diggines, 2013:238).

A Cronbach's alpha value above 0.8 indicates good reliability. A value between 0.6 and 0.8 indicates acceptable reliability and a value below 0.6 is deemed unacceptable. Cronbach's alpha was used in this study to test internal reliability (Malhotra, 2010:319). Reliability should be calculated for all multiple-item rating scales that provide data at an interval level.

In this study reliability needed to be calculated for perceived credibility, perceived influence of social media, actual influence of social media and social media usage.

6.5.1 PERCEIVED CREDIBILITY OF SOCIAL MEDIA

The perceived credibility of information sources used in the decision of which university to attend was measured by the credibility (source) scale first used by Lichtenstein and Bearden (1989 in Brunel & Hensel, 1992:718) (see Annexure A, question 3). It was assessed through four separate five-item, five-point summated rating scales that measured the perceived credibility of the source of a message by considering sincerity, honesty, dependability, trustworthiness and credibility. None of the scale items in the original scale were reverse scored. According to Lichtenstein and Bearden (Brunel & Hensel, 1992), the credibility (source) scale has good internal consistency with a reported Cronbach's alpha coefficient of 0.78. In this study the Cronbach's alpha coefficient is 0.928 (Table 23 below). The reliability tests can be seen in Annexure F.

Table 23: Reliability results question 3

Dimension	Items	Cronbach's Alpha
Perceived credibility	Sincerity	0.928
	Honesty	
	Dependability	
	Trustworthy	
	Credibility	

6.5.2 PERCEIVED INFLUENCE OF SOCIAL MEDIA

The original scale was used by McQuiston (1989) and measured the degree to which the information offered by a person to others for consideration is perceived to influence the actions of the other members of a decision-making unit (Bruner & Hensel, 1992:955). This five-item, five-point Likert-like summated rating scale (see Annexure A, question 5) was adapted to measure the degree to which information offered on social media is perceived to influence the decision making of the student. According to McQuiston (1989), the perceived influence scale has good internal consistency with a reported Cronbach's alpha coefficient of 0.892. In the current study the Cronbach's alpha coefficient is 0.968 (Table 24 below). The reliability tests can be seen in Annexure F.

Table 24: Reliability results question 5

Dimension	Items	Cronbach's Alpha
Perceived influence of social media	Problem recognition stage	0.968
	Information search stage	
	Evaluation of alternatives stage	
	Choice stage	
	Entire decision-making process	

6.5.3 ACTUAL INFLUENCE OF SOCIAL MEDIA

The original scale was used by Kohli (1989) and measured the degree to which a member of a buying centre is perceived by another member to have influenced a particular purchase decision made by the buying centre (Bruner & Hensel, 1992:1000). The emphasis of the scale is on the result rather than the effort expended to achieve it. This nine-item, five-point Likert-like summated rating scale (see Annexure A, question 6) was adapted to measure the influence of social media on the decision-making process of a student when choosing a university to attend. Cronbach's alpha that was reported in the original study was 0.93, which indicates good scale reliability. Table 25 on the next page shows Cronbach's alpha for the current study, which is 0.982. The reliability tests can be seen in Annexure F.

Table 25: Reliability results question 6

Dimension	Items	Cronbach's Alpha
Actual influence of social media	Weight of opinions on social media	0.982
	Impact of social media on thinking about universities to attend	
	Social media influence criteria in final decision	
	Involvement of social media on rating of options	
	Social media influence others into adopting positions about various options	
	Social media changed preferences	
	Went along with suggestions on social media	
	Social media influence decision	
	Final decision reflect views on social media	

6.5.4 SOCIAL MEDIA USAGE

The scale was used to determine what respondents used social media for the most. It consisted of three factors, namely entertainment uses or activities, information-adding activities and information-seeking activities. In the original study Cronbach's alpha was reported for all three factors. Cronbach's alpha for this current study for all the factors indicates good scale reliability as can be seen in Table 26 below.

Table 26: Reliability results question 7

Dimension	Items	Cronbach's Alpha
Entertainment	Stay in touch View: Pictures and videos Make appointments Share: Pictures and videos Search: New contacts	0.859
Information adding	Share: Opinions and forums Review: Purchased products Share: Experiences on blogs Vote in polls Share information: Sport/hobby Share information: Universities	0.909
Information seeking	Search for information about studies Search for information about university Search for information about school Read product reviews	0.924

6.6 SUMMARY

In this chapter the analysis of the data was discussed. The descriptive statistics of every question were presented by means of statistical analysis, tables and graphs. In the last section the reliability tests and validity of the Likert scales that were used were presented.

In the next chapter the conclusions, recommendations and areas of further research emerging from the data will be discussed.

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

The purpose of this study was to determine the role of social media as an information source on the decision-making process of students in selecting a university. The research findings were discussed in Chapter 6 and the results from the questionnaire were presented. In this chapter, the research objectives will be revisited and paired with the data and results that were obtained. The study's contribution to the higher education industry will be highlighted, limitations will be discussed and the chapter will end with some suggestions for future research.

The primary objective of this study was to determine the role of social media, as an information source, on the decision-making process of students when selecting a university to attend. The primary objective of the study was supported by seven secondary objectives, which will now be discussed.

7.2 SECONDARY OBJECTIVES OF THE STUDY

1. The first secondary objective was to determine which information sources students consult in university choice. The possible sources were alumni members, career advisors, campus visits, events on campus, family members (not parents), friends, high school teachers, open days, parents, social media, students at the university, university publications, university websites and word-of-mouth. This was the first question and as the data in Table 11 in Chapter 6 suggests, the information sources that correspondence students consulted most in university choice were the universities' website (56.4%; n = 88), friends (34.6%; n = 54) and word-of-mouth (33.3%; n = 52). From these descriptive statistics it was concluded that students prefer to consult personal sources of information in university choice, as four of the top five information sources were personal in nature, namely friends, word-of-mouth, family members (not parents), students at the university and career advisors. The

information sources that were least consulted included events on campus, open days, high school teachers, alumni members and parents.

2. The second secondary objective was to investigate the usefulness of information sources that students consult in university choice. The options given were the same information sources listed in the first secondary objective above. This was the second question and as the data in Table 12 in Chapter 6 suggests, the sources that students found most useful were university websites (80.1%; n = 125), friends (67.3%; n = 105), word-of-mouth (63.5%; n = 99), university publications (55.8%; n = 87), students at the university (52.6%; n = 82) and social media (44.9%; n = 70). In Chapter 4 it was highlighted that previous studies found that personal sources such as friends and family, parents, counsellors, other students, teachers and university admission officers are very important to students. In this study modern technological sources such as the university website and social media were considered to be more useful than traditional information sources such as open days, alumni members, events on campus, high school teachers and parents. Personal sources of information such as parents and teachers were not popular sources of information in this study. This can be due to the fact that previous research was conducted among residential university students, whereas this study focused on correspondence students. The majority of correspondence students in this study were older than 25, as can be seen in Figure 16 of Chapter 6. This could mean that they no longer live with their parents and do not have contact with teachers. Since Unisa is a correspondence university, information sources such as open days and events on campus might not be accessible to students. In previous research word-of-mouth was also considered as one of the top five information sources when selecting a university (Simões & Soares, 2010:379; Brown *et al.*, 2009:317; Wiese, van Heerden *et al.*, 2009:54; Bonnema & van der Waladt, 2008:319; Briggs & Wilson, 2007:63; Veloutsou *et al.*, 2005:281; Hoyt & Brown, 2003:8; Moogan *et al.*, 1999:219;). This is also true of this research study.
3. The third secondary objective was to determine if students find social media to be a credible source of information. Question 3 dealt with the credibility of social media as an information source by considering sincerity, honesty, dependability, trustworthiness and credibility constructs. In Table 13 in Chapter 6, the data suggests that students perceived social media to be a credible information source with a mean

score of 3.39. Nunes and Bellin (2012) list social media as a personalised information source as seen in Table 6 in Chapter 4.

4. The fourth secondary objective was to determine which social media platforms are the most popular amongst students for gathering information on universities. From Table 14 in Chapter 6 it is clear that Facebook was the most popular platform for gathering information about universities, with 57 respondents (36.5%) selecting the option Facebook. This was followed by blogs (11.5%; $n = 18$) and LinkedIn (9%; $n = 14$).
5. The fifth secondary objective was to investigate if social media has an influence on the student decision-making process in university choice. From the data analysis it was found that although it was not a strong influence, the average view was that social media does have a slight perceived influence on the decision-making process when students choose a university, with a reported mean score of 2.47 ($SD = 1.30$). As can be seen in Table 15 in Chapter 6, the slight perceived influence is the strongest in step 2 of the decision-making process when students search for information. This had a mean score of 2.58 ($SD = 1.39$). The actual influence of social media on decision making was also measured, with the same outcome. The reported mean score was 2.47 ($SD = 1.26$), indicating that views were very different on whether social media actually influences decision making. The inferential statistics compared perceived and actual influence and the conclusion was that there is a very strong linear relationship between the two constructs, as can be seen in Table 19 and Figure 36 in Chapter 6. Taking the above discussion into consideration, social media was found to not have a significant influence on the decision-making process of students.
6. The sixth secondary objective was to determine if students in different age groups differ in their use of social media. Table 18 in Chapter 6 suggests that respondents overall used social media for entertainment purposes. This had a reported mean of 3.02 ($SD = 0.94$). Information seeking was the second most used activity ($M = 2.90$; $SD = 1.28$), followed by information adding ($M = 2.36$; $SD = 1.06$). The inferential statistics indicate that the sub-groups (respondents 18 – 30 years old and 31 years and older) did not differ significantly in their social media usage as measured by the social media usage scale. This can be seen in Table 20, 21 and 22 of Chapter 6. There is, however, a slight difference between the means in the activities that they

engaged in on social media. In Table 18 the difference between social media usage of respondents aged 18 – 30 years and 31 years and older were reported. From the findings it was interesting to note that respondents aged 18 – 30 years mostly used social media for entertainment activities, whereas respondents 31 years and older used it for information-seeking activities.

7. The last secondary objective was to determine how much time students spend on social media. Respondents were asked to indicate how many times per day they accessed social media. The majority of students (90.3%; n = 134) accessed social media more than once a day. The most accessed it 1 – 3 times a day (47.1%; n = 72), as can be seen in Figure 33 in Chapter 6. Respondents were also asked to indicate how many hours a day they spent on social media and the results were reported in Figure 34 in Chapter 6. The results indicate that 69.5% of the students (n = 107) spent 1 – 3 hours on social media and 15.5% spent more than 4 hours a day on social media.

7.3 OTHER FINDINGS

Respondents were also asked to indicate what devices they used to access social media. The findings were reported in Figure 35 and indicate that the majority of the students accessed social media using their cellphones (83.3%; n = 130).

7.4 RECOMMENDATIONS BASED ON FINDINGS

- As respondents indicated that the university website is the most used and useful source of information, it would be beneficial for universities to make sure that potential students can navigate the website easily and that all the information they need is on the website.
- Facebook is considered to be the most popular social media platform to gather information on which university to attend. Universities need to ensure that their Facebook page has the necessary information available or links to the information available that potential students need.
- Respondents of different age categories indicated that they used social media differently, so universities can use this information when adding content to their social

media platforms. They can create and add different types of content in each category aimed at the different users. For example, a fun video that promotes the university can be targeted at younger students, whereas older students will mostly be interested in factual information in the form of a link to information on different social media platforms like a LinkedIn Group.

- Taking the above into consideration, universities should investigate how they can capitalise on their students spending such a large amount of time on social media and how they can communicate with their target market effectively using social media. From this study it is clear that students are present online and using social media on their cellphones. Universities should make sure that the content they put on social media is optimised for use on a cellphone.

7.5 CONTRIBUTION TO THE SOUTH AFRICAN HIGHER EDUCATION MARKET

From the research it was found that students are definitely online and they are using social media. The majority of students spend 1 – 3 hours a day on social media with 70% accessing it 1 – 6 times a day using a cellphone. Students of different age groups, however, differ in the way that they use social media. The younger generation use it more for entertainment purposes, whereas the older generation use it to look for information. The most popular activity among all age groups is sharing videos and pictures. If universities can come up with creative marketing that students want to share, they can capitalise on this behaviour.

7.6 LIMITATIONS

- The sample was only drawn from Unisa first-year students, and thus it is not a representative view of all first-year students and results cannot be generalised.
- Because these are correspondence students, they spend a lot of time online and the behaviour that they display might not be a true reflection of all students and age groups.

7.7 SUGGESTIONS FOR FURTHER RESEARCH

Areas that were identified for further research include the following:

- Since this study was conducted only using Unisa students, who are correspondence students, the study may yield different results in a residential university setting.
- Word-of-mouth was one of the top sources of information but with the growing popularity of social media, it would be valuable to look into electronic word-of-mouth.
- Unisa students need to be on the internet for tuition. The social media usage and time spent on social media do not appear to differ much between the different age groups. Further research could investigate if this is the case for a different sample of these groups in another setting.
- It would also be beneficial to investigate how students use social media and what they feel about social media in the actual learning process and not only in the decision-making process.

7.8 SUMMARY

This chapter concludes the research study, which aimed to determine the role of social media, as an information source, in the decision-making process of first-year students in university choice. The research objectives were used as a basis for the conclusions to be drawn and for recommendations to be made. From the research it can be seen that social media does play a role in students' lives. The contribution to the higher education market was highlighted and the limitations were discussed. Future research avenues were also identified.

REFERENCES

Agichtein, E., Castillo, C., Donato, D., Gionis, A. & Mishne, G. 2008. *Finding High-Quality Content in Social Media*. Paper presented at the first ACM International Conference on Web Search and Data Mining, California, 11-12 February: 183-193.

Akar, E. & Topcu, B. 2011. An examination of the factors influencing consumers' attitudes toward social media marketing. *Journal of Internet Commerce*, 10: 35 – 67.

Alexa. 2015. *Top Sites in South Africa*. [Online] Available from: <http://www.alexa.com/topsites/countries/ZA> [Accessed: 2015-02-04].

Alexander, B. & Levine, A. 2008. Web 2.0 Storytelling: Emergence of a New Genre. *EduCAUSE Review*, 43(6): 40 – 56.

American Marketing Association. 2011. *Resource Library: Dictionary*. [Online] Available from: http://www.marketingpower.com/_layouts/Dictionary.aspx?dLetter=A [Accessed: 2011-07-14].

Anon A. 2010. *South Africa's Universities*. [Online] Available from: <http://www.southafrica.info/about/education/universities.htm> [Accessed: 2010-02-26].

Anon B. 2010. *South Africa's Geography*. [Online] Available from: <http://www.southafrica.info/about/geography/geography.htm> [Accessed: 2010-02-26].

Anon. 2014. *South African Social Media Landscape 2015*. [Online] Available from: <http://www.worldwideworx.com/wp-content/uploads/2014/11/Exec-Summary-Social-Media-2015.pdf> [Downloaded: 2015-04-16].

Anon. 2015. Statista: The Statistics Portal. [Online] Available from: <http://www.statista.com/> [Accessed: 2015-04-24].

Armstrong, G. & Kotler, P. 2003. *Marketing: An introduction*. 6th edition. New Jersey: Prentice-Hall.

Băcilă, M. 2008. 12th Grade students' behaviour in decision making process of educational choices. *Management and Marketing*, 3(4): 81 – 92.

Badawy, A.M. 2009. Technology management simply defined: A tweet plus two characters. *Journal of Engineering and Technology Management*, 26: 219-224.

Barker, M., Barker, D., Bormann, N & Neher, K. 2013. *Social media marketing: A strategic approach*. South-Western Cengage Learning.

Barnes, N.D. & Barnes, F.R. 2009. Equipping your organization for the social networking game. *Information Management Journal*, 43(6): 28 – 47.

Belanger, C.H., Syed, S. & Mount, J. 2007. The make up of institutional branding: Who, what, how? *Tertiary Education and Management*, 13(3): 169 – 185.

Beneke, J.H. 2011. Marketing the institution to prospective students – A review of brand (reputation) management in higher education. *International Journal of Business Management*, 6(1): 29 – 44.

Berk, R.A. 2010. How do you leverage the latest technologies, including Web 2.0 tools, in your classroom? *International Journal of Technology in Teaching and Learning*, 6(1): 1 -13.

Bian, J., Liu, Y., Agichtein, E. & Zha, H. 2008. Finding the right facts in the crowd: Factoid question answering over social media. Paper presented at the 17th World Wide Web Conference of Beihang Univeristy, Beijing, 21 – 25 April: 467 – 476.

Bolotaeva, V. & Cata, T. 2011. Marketing opportunities with social networks. *Journal of Internet Social Networking and Virtual Communities*, 10.

Bonnema, J. & van der Walddt, D.L.R. 2008. Information and source preferences of a student market in higher education. *International Journal of Educational Management*, 22(4): 314 – 327.

Bosch, T.E. 2009. Using online social networking for teaching and learning: Facebook use at the Universtiy of Cape Town. *Communicatio*, 35(2):185 – 200.

Boshoff, C. & du Plessis, F. 2009. *Services marketing: A contemporary approach*. Cape Town: Juta.

Briggs, S. & Wilson, A. 2007. Which university? A study of the influence of cost and information factors on Scottish undergraduate choice. *Journal of Higher Education Policy and Management*, 29(1): 57 – 72.

Brijball Paramasur, S. & Roberts-Lombard, M. 2014. *Consumer behaviour*. 3rd edition. Claremont: Juta.

Broughton, J. 2008. *Wikipedia the missing manual*. California: O'Reilly Media.

Brown, C., Varley, P. & Pal, J. 2009. University course selection and services marketing. *Marketing Intelligence & Planning*, 27(3): 310 – 325.

Bruner, G.C. & Hensel, P.J. 1992. *Marketing Scales Handbook: A compilation of multi-item measures*. Illinois: American Marketing Association.

Bughin, J. Doogan, J. & Vetvik, O.J. 2009. A new way to measure word-of-mouth marketing. *McKinsey Quarterly*, April: 1 – 9.

Bunzel, D.L. 2007. Universities sell their brands. *Journal of Product & Brand Management*, 16(2): 152 - 153.

Burns, A.C. & Bush, R.F. 2000. *Marketing research*. 3rd Edition. New Jersey: Prentice Hall.

Cabrera, A.F. & La Nasa, S.M. 2000. Understanding the college choice process. *New Directions for Institutional Research*, 107: 5 – 22.

Cachia, R., Compañó, R. & Da Costa, O. 2007. Grasping the potential of online social networks for foresight. *Technological Forecasting & Social Change*, 72: 1179 - 1203.

Cant, M.C. (ed). 2010. *Marketing: An introduction*. Cape Town: Juta.

Cant, M.C. & van Heerden, C.H. 2010. *Marketing management: A South African perspective*. Cape Town: Juta.

Centre for Higher Education Transformation. 2015. *South African Public Higher Education: Key Data 2013*. [Online] Available from: <http://chet.org.za/data/sahe-open-data#> [Accessed: 2015-02-04].

Chapman, D.W. 1986. A model of student college choice. *Journal of Higher Education*, 52(5): 490 – 505.

Cheung, C.M.K, Lee, M.K.O. & Thadani, D.R. 2009. The impact of positive electronic word-of-mouth on consumer online purchasing decision. In Miltiadis, D.L. et al. (eds). *Proceedings of the Second World Summit on the Knowledge Society, WSKS, Greece*, 16 – 18 September: 501 – 510.

Clemons, E.K. 2009. The complex problem of monetizing virtual electronic social networks. *Decision Support Systems*, 48(1): 46 – 56.

Comm, J. & Burge, K. 2009. *Twitter power: How to dominate your market one tweet at a time*. New Jersey: Wiley & Sons.

Constantinides, E. & Fountain, S.J. 2007. Web 2.0: Conceptual foundations and marketing issues. *Journal of Direct, Data and Digital Marketing Practices*, 9(2): 231 – 244.

Constantinides, E. & Fountain, S.J. 2008. Web 2.0: Conceptual foundations and marketing issues. *Journal of Direct, Data and Digital Marketing Practice*, 9(3): 231 – 244.

Constantinides, E. & Stagno, M.C.Z. 2011. Potential of the social media as instruments of higher education marketing: A segmentation study. *Journal of Marketing for Higher Education*, 21(1):7 – 24.

Cooper, D.R. & Schindler, P.S. 2006. *Business research methods*. 9th edition. New York: McGraw-Hill.

Cormode, G. & Krishnamurthy, B. 2008. Key differences between Web 1.0 and Web 2.0. [Online] Available from: <http://journals.uic.edu/ojs/index.php/fm/article/viewArticle/2125/1972> [Accessed: 2014-11-09].

Council on Higher Education. 2009. *Higher Education Monitor No. 8: The State of Higher Education in South Africa*. [Online] Available from: http://www.che.ac.za/documents/d000201/Higher_Education_Monitor_8.pdf [Downloaded: 2010-08-09].

Daugherty, T., Eastin, M.S. & Bright, L. 2010. Exploring consumer motivations for creating user-generated content. *Journal of Interactive Advertising*, 8(2): 16 - 25.

Dawes, P.L. & Brown, J. 2005. The composition of consideration and choice sets in undergraduate university choice: An exploratory study. *Journal of Marketing for Higher Education*, 14(2): 37 - 59.

de Pelsmacker, P., Geuens, M. & van den Bergh, J. 2007. *Foundations of marketing communications: A European perspective*. London: Prentice Hall.

Diamantopoulos, A. & Schlegelmilch, B. 2000. *Taking the fear out of data analysis*. London: Thompson.

du Plessis, F., Bothma, N., Jordaan, Y. & van Heerden, N. 2005. *Integrated marketing communication*. 2nd edition. Claremont: New Africa Books.

du Plessis, P.J. & Rousseau, G.G. 2003. *Buyer behaviour: A multicultural approach*. Cape Town: Oxford.

du Plessis, T.C. 2010. Theoretical guidelines for social media marketing communication. *Communicare*, 29(1): 1 – 20.

Dunnett, A., Moorhouse, J., Walsh, C. & Barry, C. 2012. Choosing a university: A conjoint analysis of the impact of higher fees on students applying for university in 2012. *Tertiary Education and Management*: 1 – 22.

Facebook. 2015. *Press Room: Statistics*. [Online] Available from: <http://www.facebook.com/press/info.php?statistics> [Accessed: 2015-02-04].

Fox, S. 2009. *E Riches 2.0*. New York: AMACOM Books.

Garnyte, M. & De Ávila Pérez, A. 2009. *Exploring Social Media Marketing: Toward a Richer Understanding of Social Media in Postmodernity*. [Online] Available from: http://theses.asb.dk/projekter/fbspretrieve/8660/Exploring_Social_Media_Marketing_-_Towards_a_Richer_Understanding_of_Social_Media_in_Postmodernity.pdf [Downloaded: 2010-08-19].

Gatfield, T., Barker, M. & Graham, P. 1999. Measuring communication impact for university advertising materials. *Corporate Communications: An International Journal*, 4(2): 73 – 79.

GetSmarter. 2012. *Social media course: Module 1 course notes*. Cape Town: Management Sciences, University of Cape Town.

Gillin, P. 2007. *The new influencers: A marketer's guide to the new social media*. California: Quil Driver Books.

Goetz, J. & Barger, C. 2008. Harnessing the media revolution to engage the youth market. *Journal of Integrated Marketing Communications*, 26 – 32.

Graham, J.M., Faix, A. & Hartman, L. 2009. Crashing the Facebook party: One library's experiences in the students' domain. *Library Review*, 58(3): 228 - 236.

Gray, G.J., Fam, K.S. & Llanes, V.A. 2003. Cross cultural values and the positioning of international education brands. *Journal of Product & Brand Management*, 12(2): 108 – 109.

Gurău, C. 2008. Integrated online marketing communication: Implementation and management. *Journal of Communication Management*, 12(2): 169 – 184.

Hair, J., Bush, R. & Ortinau, D. 2006. *Marketing research: Within a changing environment*. 3rd edition. New York: McGraw-Hill.

Hawkins, D.I., Best, R.J. & Coney, K.A. 2001. *Consumer behaviour: Building marketing strategy*. 8th edition. New York: McGraw-Hill.

HEDA. 2015. *Higher Education Data Analyzer: Indicator Report*. [Online] Available from: http://www.heda.co.za/heda_proxy/sqlreporting/report.aspx?qsKey=2aad94af-8d45-47da-8dcd-fb62f88adc5d&userId=&objPk=c23bb754-4359-4e7d-ae02-ff25f2b12ef6&ot=4&oid=c23bb754-4359-4e7d-ae02-ff25f2b12ef6&usr= [Accessed: 2015-02-04].

Hesketh, A.J. & Knight, P.T. 1999. Postgraduates' choice of programme: Helping universities to market and postgraduates to choose. *Studies in Higher Education*, 24(2): 151 – 163.

Holtzhausen, T. 2006. *A consumer profile of first year Marketing students at Pretoria Campus of the Tshwane University of Technology*. Unpublished masters dissertation. University of South Africa. [Online] Available from <http://uir.unisa.ac.za/xmlui/bitstream/handle/10500/2230/dissertation.pdf?sequence=1> [Downloaded: 2015-03-20].

Hongcharu, B. & Eiamkanchanalai, S. 2009. A comparative study of traditional mass media, the internet and mobile phones for integrated marketing communications. *Journal of Business & Economics Research*, 7(12): 31 – 40.

Hoyt, J.E. & Brown, A.B. 2003. Identifying college choice factors to successfully market your institution. *C&U Journal*, Spring: 3 – 10.

Ivy, J. 2008. A new higher education marketing mix: The 7Ps for MBA marketing. *International Journal of Educational Management*, 22(4): 288 – 299.

Jansen, J.D. 2003. *Changes and continuities in South Africa's higher education system, 1994 – 2004*. In Chrisholm, L. (ed). *Changing class? Education and social change in post apartheid South Africa*. Pretoria: Human Science Research Council.

Kardes, F., Cronley, M. & Cline, T.W. 2010. *Consumer behaviour*. Cincinnati: South Western Cengage Learning.

Kelly, J.F. 2009. *Don't spend a dime: The path to low-cost computing*. New York: Springer-Verlaag.

Kim, W., Jeong, O. & Lee, S. 2010. On social websites. *Information Systems*, 35: 215 – 236.

Kitchen, P.J. & Schultz, D.E. 1999. A multi-country comparison of the drive for IMC. *Journal of Advertising Research*, 39(1):21 – 38.

Kitchen, P.J., Schultz, D.E., Kim, I., Dongsub, H. & Li, T. 2004. Will agencies ever “get” (or understand) IMC? *European Journal of Marketing*, 38(11): 1417 – 1436.

Klassen, M. 2002. Relationship marketing on the internet: The case of top- and lower-ranked universities and colleges. *Journal of Retailing and Consumer Services*, 9: 81 – 85.

Kolb, B. 2008. *Marketing research*. California: Sage.

Kotler, P. 1979. Strategies for introducing marketing into non-profit organisations. *Journal of Marketing*, 43(1): 37 – 44.

Kotler, P. & Fox, K.F.A. 1995. *Strategic marketing for educational institutions*. 2nd edition. New Jersey: Prentice Hall.

Kotler, P. & Keller, K.L. 2006. *Marketing management*. 12th edition. New Jersey: Prentice Hall.

Kronberger, M. 2009a. *Research reveals how young people are consuming social media* [Online] Available from: <http://www.studentmarketing.co.za/portfolio/first-time-research-reveals-how-young-people-are-consuming-social-media-in-south-africa/> [Accessed: 2015-03-20].

Kronberger, M. 2009b. *SA Students are Watching Less TV and Spending More Time Online*. [Online] Available from: <http://www.studentmarketing.co.za/sa-students-are-watching-less-tv-and-spending-more-time-online/> [Accessed: 2015-03-20].

Lamb, C.W., Har, J.F., McDaniel, C., Boshoff, C. & Terblance, N.S. 2006. *Marketing*. 6th Edition. Cape Town: Oxford University Press.

Lastufka, A. & Dean, M.W. 2009. *YouTube: An insider's guide to climbing the charts*. California: O' Reilly Media.

Malhotra, N.K. 2010. *Marketing research: An applied orientation*. 6th edition. New Jersey: Pearson.

Mangold, W.G. & Faulds, D.J. 2009. Social media: The new hybrid element of the promotion mix. *Business Horizons*, 52: 357 – 365.

Maringe, F. 2006. University marketing: Perceptions, practices and prospects in the less developed world. *Journal of Marketing in Higher Education*, 15(2): 129 – 153.

Maringe, F. & Carter, S. 2007. International students' motivations for studying in UK HE: Insights into the choice and decision making of African students. *International Journal of Educational Management*, 21(6): 459 – 475.

McDaniel, C. & Gates, R. 2010. *Marketing research: The essentials*. 7th edition. Hoboken: Wiley & Sons.

Mendes-Filho, L. & Tan. F.B. 2009. *User-generated content and consumer empowerment in the travel industry: A uses and gratifications and dual-process conceptualization*. Paper presented at the Thirteenth Annual Pacific Asia Conference on Information Systems, Hyderabad, 10 – 12 July.

Ministry of Education. 2001. *National Plan of Higher Education*. [Online] Available from: http://chet.org.za/manual/media/files/chet_hernana_docs/South%20Africa/National/National%20Plan%20for%20HE%20SA.pdf [Downloaded: 2010-09-06].

Montgomery, K.C. & Chester, J. 2009. Interactive food and beverage marketing: Targeting adolescents in the Digital Age. *Journal of Adolescent Health*, 45: 18 – 29.

Moogan, Y.J. & Baron, S. 2003. An analysis of student characteristics within the student decision making process. *Journal of Further and Higher Education*, 27(3): 271 – 287.

Moogan, Y.J., Baron, S. & Bainbridge, S. 2001. Timings and trade-offs in the marketing of higher education courses: A conjoint approach. *Marketing Intelligence & Planning*, 19(3): 179 – 187.

Moogan, Y.J., Baron, S. & Harris, K. 1999. Decision-making behaviour of potential higher education students. *Higher Education Quarterly*, 53(3): 211 – 228.

Mortimer, K. 1997. Recruiting overseas undergraduate students: Are their information requirements being satisfied? *Higher Education Quarterly*, 51(3): 225 – 238.

Mzimela, L. 2002. *Marketing in higher education – It's a multitude of missed opportunities.* [Online] Available from: www.biz-community.com/article/196/98/346.html [Accessed: 2011-02-15].

Naude, P. & Ivy, J. 1999. The marketing strategies of universities in the United Kingdom. *The International Journal of Educational Management*, 13(3): 126 – 134.

Nieman, I., Crystal, A. & Grobler, A.F. 2003. Integrated marketing communication (IMC) and the role of public relations (PR) therein: A case study of University X. *Communicare*, 22(1): 21 – 57.

Nunes, P.F. & Bellin, J.B. 2012. Winning the new battle for consumer influence. *Outlook Point of View*, 1.

O'Connor, L. & Lundstrom, K. 2011. The impact of social marketing strategies on the information seeking behaviors of college students. *Reference & User Services Quarterly*, 50(4): 351 – 365.

O'Reilly, T. 2005. *What is Web 2.0: Design patterns and business models for the next generation of software.* [Online] Available from: <http://www.oreilly.com/pub/a/web2/archive/what-is-web-20.html> [Accessed: 2015-03-20].

Packer, R. 2011. Social media marketing: The art of conversational sales. [Online] Available from: <http://www.wsimarketbuilders.com/socialmediamarketingwhitepaper.pdf> [Downloaded: 2015:07:14].

Parasuraman, A., Grewal, D. & Krishan, R. 2007. *Marketing research.* Boston: Houghton Mifflin.

Patricios, O. 2009. *Social media will reinvent brands.* [Online] Available from: http://reference.sabinet.co.za/webx/access/electronic_journals/mfsa1/mfsa1_apr_2009_a16.pdf [Downloaded: 2015-04-15].

Peltier, J.W., Schibrowsky, J.A. & Schultz, D.E. 2003. Interactive integrated marketing communication: Combining the power of IMC, the new media and database marketing. *International Journal of Advertising*, 22: 93 – 115.

Raposo, M. & Alves, H. 2007. *A Model of University Choice: An Exploratory Approach*. [Online] Available from: <http://mpra.ub.uni-muenchen.de/5523/> [Accessed: 2010-05-06].

Reddy, T. 2004. *Higher Education and Social Transformation – South African Case Study*. [Online] Available from: http://www.che.ac.za/documents/d000066/HEandSocialTransformationReport_25Feb2004.pdf [Downloaded: 2010-09-12].

Rensburg, R. & Cant, M. 2009. *Public relations: African perspectives*. 2nd edition. Claremont: Heinemann.

Saaty, T.L. 2008. Decision making with the analytic hierarchy process. *International Journal Services Sciences*, 1(1): 83 – 98.

Safko, L. 2010. *The social media bible: Tactics, tools and strategies for business success*. Hoboken, Hoboken: John Wiley & Sons.

Safko, L. & Brake, D.K. 2009. *The social media bible: Tactics, tools and strategies for business success*. Hoboken, N.J.: John Wiley & Sons.

Schindler, R.M. & Bickart B. 2005. Published word-of-mouth: referable, consumer-generated information on the Internet. In: Haugtvedt, C.P., Machleit, K.A. & Yalch, R.F. (eds). *Online Consumer Psychology: Understanding and Influencing Behavior in the Virtual World*. Hillsdale: Lawrence Erlbaum Associates.

Scott, D.M. 2007. *The new rules of marketing & PR*. New Jersey: Wiley.

Simões, C. & Soares, A.M. 2010. Applying higher education: Information sources and choice factors. *Studies in Higher Education*, 35(4): 371 – 389.

Sirakaya, E. & Woodside, A.G. 2005. Building and testing theories of decision making by travellers. *Tourism Management*, 26: 815 – 832.

Solis, B. 2009. *The Conversation Prism v2.0*. [Online] Available from: <http://www.briansolis.com/2009/03/conversation-prism-v20/> [Accessed: 2015-04-10].

Solis, B. 2015. *The Conversation Prism Version 4.0*. [Online] Available from: <https://conversationprism.com/> [Accessed: 2015-02-04].

Soutar, G.N. & Turner, J.P. 2002. Students' preferences for university: A conjoint analysis. *The International Journal of Educational Management*, 16(1): 40 – 45.

Spiller, L.D. & Baier, M. 2004. *Contemporary direct marketing*. New Jersey: Pearson Prentice-Hall.

Thackeray, R., Neiger, B.L., Hanson, C.L. & McKenzie, J.F. 2008. Enhancing promotional strategies within social marketing programs: Use of Web 2.0 social media. *Health Promotions Practice*, 9(4): 338 – 343.

Tshwane University of Technology. 2009. *About us*. [Online] Available from: <http://www.tut.ac.za/About%20Us/> [Accessed: 2011-07-14].

Tustin, D.H., Lighthelm, A.A., Martins, J.H., & van Wyk, H. de J. 2005. *Marketing research in practice*. Pretoria: Unisa Press.

van der Veer, E.A. 2009. *Facebook: The missing manual*. California: O'Reilly Media.

van Heerden, C.H. & Drotsky, A. 2011. *Personal selling*. 2nd edition. Cape Town: Juta.

Veloutsou, C., Lewis, J. & Paton, R.A. 2004. University selection: Information requirements and importance. *International Journal of Educational Management*, 18(3): 160 – 171.

Veloutsou, C., Paton, R.A. & Lewis, J. 2005. Consultation and reliability of information sources pertaining to university selection: Some questions answered? *The International Journal of Educational Management*, 19(4): 279 - 291.

Weinberg, B.D. & Pehlivan, E. 2011. Social spending: Managing the social media mix. *Business Horizons*, 54: 275 – 282.

Wertime, K. & Fenwick, I. 2008. *Digimarketing: The essential guide to new media & digital marketing*. Singapore: Wiley & Sons.

Wiese, M. 2008. *A Higher Education Marketing Perspective on Choice Factors and Information Sources considered by South African First Year University Students*. Unpublished doctoral thesis. Pretoria: University of Pretoria. [Online] Available from: UPeTD: <http://upetd.up.ac.za/thesis/available/etd-11262008-080801/> [Accessed: 2010-09-07].

Wiese, M., Jordaan, Y. & van Heerden, C.H. 2009. Communication to prospective students through appropriate sources of information: A comparative study of selected public higher education institutions. *Communicare*, 28(1): 68 – 86.

Wiese, M., van Heerden, N., Jordaan, Y. & North, E. 2009. A marketing perspective on choice factors considered by South African first year students in selecting a higher education institution. *South African Business Review*, 13(1): 39 – 60.

Whisman, R. 2009. Internal branding: A university's most valuable intangible asset. *Journal of Product & Brand Management*, 18(5): 367 – 370.

Wiid, J. & Diggins, C. 2013. *Marketing research*. 2nd edition. Cape Town: Juta.

World Wide Worx. 2014. South African social media landscape 2014: Executive summary. [Online] Available from <http://www.worldwideworx.com/wp-content/uploads/2013/10/Exec-Summary-Social-Media-2014.pdf> [Downloaded: 2015-03-23].

Wright, R. 2006. *Consumer Behaviour*. London: Thomson Learning

Xiang, Z. & Gretzel, U. 2010. Role of social media in online travel information search. *Tourism Management*, 31: 179 – 188.

Young, A. 2009. Online social networking: An Australian perspective. *International Journal of Emerging Technologies and Society*, 7(1): 39 - 57.

YouTube. 2015. *YouTube Statistics*. [Online] Available from <https://www.youtube.com/yt/press/statistics.html> [Accessed: 2015-02-04].

Zarrella, D. 2009. *The social media marketing book*. California: O'Reilly Media.

Zeithaml, V.A., Bitner, M.J. & Gremler, D.D. 2006. *Services marketing: Integrating customer focus across the firm*. 4th edition. New York: McGraw-Hill.

**-ANNEXURE A-
QUESTIONNAIRE**

Department of Marketing and Retail Management

**THE ROLE OF SOCIAL MEDIA AS AN INFORMATION SOURCE
ON THE DECISION-MAKING PROCESS OF 1ST YEAR STUDENTS
IN UNIVERSITY CHOICE**

Research conducted by:

Mrs L. Fourie (44940556)

Tel: 012 429 3799

Email: fourile@unisa.ac.za

Dear Respondent,

You are invited to participate in an academic research study conducted by Mrs L. Fourie, for the purpose of completing a masters degree. The purpose of the study is to determine what role social media has in the decision-making process of a 1st year student when selecting a university.

Please note the following:

- This study involves an anonymous survey. Your name will not appear on the questionnaire and the answers you give will be treated as strictly confidential. You cannot be identified in person based on the answers you give. [Kindly note that consent cannot be withdrawn once the questionnaire is submitted as there is no way to trace the particular questionnaire that has been filled in.]
- Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences. Please answer the questions in the attached questionnaire as completely and honestly as possible. This should not take more than 15 minutes of your time.
- The results of the study will be used for academic purposes only and may be published in an academic journal. We will provide you with a summary of our findings on request.
- Please contact my study leader Prof MC Cant at cantmc@unisa.ac.za if you have any questions or comments regarding the study.

Please answer all the questions by placing a cross (*) in the appropriate block. There are no right or wrong answers. We are interested in understanding your use of social media marketing.

Consent to Participate:

*I recognise that I have read and understood that the survey is a study done by Mrs L Fourie with the purpose of completing a masters degree. I understand the purpose of the study. I also understand my role as a research participant and the fact that the information gathered in this survey will be utilised to determine what role social media has in the decision-making process of a 1st year student in selecting a university. It is clear to me that the intended outcomes of the study will be used for academic purposes only as well as to produce academic publications. I acknowledge that I may choose to not participate or withdraw from the survey at any time without fear of repercussion and that **I am older than 18 years of age.***

Yes	1
No	2

→ **Continue to Q1**

→ **Thank you for your willingness to participate but you do not qualify to complete this questionnaire**

Section A: Information sources

QUESTION 1

Please indicate which of the following **information sources** you used during your choice on which university to attend.

Alumni members	1
Career advisors	2
Campus visits	3
Events on campus	4
Family members (not parents)	5
Friends	6
High school teachers	7

Open days	1
Parents	2
Social media	3
Students at the university	4
University publications	5
University website	6
Word-of-mouth	7

QUESTION 2

The following question measures the **degree to which you use different sources of information** when deciding on a university to attend. Please indicate the extent to which you found the source of information useful.

	Social Media	Not at all useful	Not very useful	Somewhat useful	Very useful	Did not use the source
3.1	Alumni members	1	2	3	4	5
3.2	Career advisors	1	2	3	4	5
3.3	Campus visits	1	2	3	4	5
3.4	Events on campus	1	2	3	4	5
3.5	Family members (not parents)	1	2	3	4	5
3.6	Friends	1	2	3	4	5
3.7	High school teachers	1	2	3	4	5
3.8	Open days	1	2	3	4	5
3.9	Parents	1	2	3	4	5

	Social Media	Not at all useful	Not very useful	Somewhat useful	Very useful	Did not use the source
3.10	Social media	1	2	3	4	5
3.11	Students at the university	1	2	3	4	5
3.12	University publications	1	2	3	4	5
3.13	University website	1	2	3	4	5
3.14	Word-of-mouth	1	2	3	4	5

Section B: Perceived credibility

QUESTION 3

The following questions measure the **perceived credibility** of social media as an information source in choice of university. Please indicate on the scale how you perceive social media.

In sincere	1	2	3	4	5	Sincere
Dishonest	1	2	3	4	5	Honest
Not dependable	1	2	3	4	5	Dependable
Not trustworthy	1	2	3	4	5	Trustworthy

Section C: Use of social media in university choice

QUESTION 4

Which of the following social media platforms did you use to gather information on university choice?

Facebook	1
LinkedIn	2
Twitter	3
YouTube	4
Blogs	5
None	6
Other	

Please specify

QUESTION 5

The following questions measure the **perceived influence** of social media on the decision making process when selecting a university. Choose 1 if it had a very small influence on the left and choose 5 if it had a very large influence on the right. You may also choose any number in between according to the level of agreement.

		No influence	Some influence	Quite a lot of influence	A great deal of influence	A very great deal of influence
5.1	I believe the communication offered via social media influenced consideration when I realised I want to attend university.	1	2	3	4	5
5.2	I believe the communication offered via social media influenced consideration when I searched for information on universities	1	2	3	4	5
5.3	I believe the communication offered via social media influenced consideration when I evaluated my alternatives	1	2	3	4	5
5.4	I believe the communication offered via social media influenced consideration when I had to make a choice of which university to attend	1	2	3	4	5
5.5	I believe the communication offered via social media influenced consideration throughout the entire university decision making process	1	2	3	4	5

QUESTION 6

The following questions measure the **influence** of social media on the decision making process when choosing a university to attend. Please read the questions carefully as each question is about a different source of information. Choose 1 if it had a very small influence on the left and choose 5 if it had a very large influence on the right. You may also choose any number in between according to the level of agreement.

		Very small influence	Small influence	Somewhat of an influence	Large influence	Very large influence
6.1	How much weight did you give to opinions viewed on social media	1	2	3	4	5
6.2	How much impact did social media have on your thinking about universities to attend	1	2	3	4	5
6.3	To what extent did social media influence the criteria you used for making your final decision.	1	2	3	4	5
6.4	How much effect did the involvement of social media have on how the various options were rated.	1	2	3	4	5
6.5	To what extent did social media influence others into adopting certain positions about the various options.	1	2	3	4	5
6.6	How much did social media change your preferences	1	2	3	4	5
6.7	To what extent did you go along with suggestions on social media	1	2	3	4	5
6.8	To what extent did social media influence the decision you eventually reached.	1	2	3	4	5
6.9	To what extent did the final decision reflect the views on social media	1	2	3	4	5

Section D: Social media usage

QUESTION 7

The following question measures your **social media usage**. A number of statements describing activities on social media are listed in the column on the left. Please read each statement carefully and then indicate the extent to which the statement describe your usage of social media. Please choose 1 if you never use the activity on social media or 5 if you always use it. You can also choose any number in between.

		Never use	Rarely use	Sometimes use	Often use	Always use
7.1	Stay in touch with contacts	1	2	3	4	5
7.2	View pictures and videos	1	2	3	4	5
7.3	Make appointments with contacts	1	2	3	4	5
7.4	Share pictures and videos	1	2	3	4	5
7.5	Search for new contacts	1	2	3	4	5
7.6	Search for information about study	1	2	3	4	5
7.7	Search for information about university	1	2	3	4	5
7.8	Search for information about school	1	2	3	4	5
7.9	Read product reviews before purchase	1	2	3	4	5
7.10	Share opinions through forums	1	2	3	4	5
7.11	Review purchased products	1	2	3	4	5
7.12	Share experiences through blogs	1	2	3	4	5
7.13	Subscribe to RSS feeds	1	2	3	4	5
7.14	Vote in polls	1	2	3	4	5
7.15	Share information about sport or hobby	1	2	3	4	5
7.16	Share information about universities	1	2	3	4	5

QUESTION 8

How many times a day do you access social media?

None	1
1 – 3 times per day	2
4 – 6 times per day	3
7 – 9 times per day	4
10 or more times per day	5

QUESTION 9

How many hours a day do you spend on social media?

No time	1
Less than 1 hour per day	2
1 – 3 hours per day	3
4 – 6 hours per day	4
7 – 9 times per day	5
10 or more hours per day	6

QUESTION 10

How do you access social media (tick as many as appropriate):

Cell phone	1
Tablet computer	2
Personal computer	3
Work computer	4
Public computer (ie internet café)	5
Other	6
I don't access social media	7

Please specify

Section E: General information

QUESTION 11

Please indicate your gender:

Male	1
Female	2

QUESTION 12

Please indicate your age group:

18 - 20	1
21 - 25	2
26 – 30	3
31 – 35	4
36 – 40	5
41 – 45	6
46 – 50	7
Older than 50	8

-ANNEXURE B-
INVITATION TO PARTICIPATE IN QUESTIONNAIRE

Fourie, Letitia

From: Fourie, Letitia
Sent: 23 October 2013 11:15
To: Fourie, Letitia
Subject: Social media as an information sources used in university choice - Survey

Dear student

You are invited to participate in an academic research study conducted by Mrs L. Fourie, for the purpose of completing a masters degree. The purpose of the study is to determine what role social media has in the decision-making process of a 1st year student when selecting a university to attend.

We would like to invite you to complete the online survey.
The questionnaire should take no more than fifteen minutes to complete.

[Please click the link below to complete the survey:](http://survey.unisa.ac.za/index.php/456455/lang-en)
<http://survey.unisa.ac.za/index.php/456455/lang-en>

Should you have any enquiries regarding the survey, please contact Mrs L Fourie, Department of Marketing and Retail Management on 012 429 3799; fourile@unisa.ac.za or her supervisor Prof MC Cant, Department of Marketing and Retail Management on 012 429 4456; cantmc@unisa.ac.za .

Kind regards
Mrs L Fourie

-ANNEXURE C-
CODING MANUAL FOR DATA ANALYSIS

CODING MANUAL FOR DATA ANALYSIS

Question number	Variable name	Columns in dataset for entire question	Variable labels	Value codes and value labels	Measure type
RespID	respid	1	Respondent number	-	Nominal
Q1	Q1_1 – Q1_14	14	Alumni members Career advisors Campus visits Events on campus Family members (not parents) Friends High school teachers Open days Parents Social media Students at university University publications University website Word of Mouth	0 = No 1 = Yes	Ordinal
Q2	Q2_1 – Q2_14	14	Alumni members Career advisors Campus visits Events on campus Family members (not parents) Friends High school teachers Open days Parents Social media Students at university University publications University website Word of Mouth	1 = Not at all useful 2= Not very useful 3 = Somewhat useful 4 = Very useful 5 = Did not use the source	Interval

Question number	Variable name	Columns in dataset for entire question	Variable labels	Value codes and value labels	Measure type
Q3	Q3_1	1	Sincerity	1 = Insincere 5 = Sincere	Interval
	Q3_2	1	Honesty	1 = Dishonest 5 = Honest	Interval
	Q3_3	1	Dependability	1 = Not dependable 5 = Dependable	Interval
	Q3_4	1	Trustworthy	1 = Not trustworthy 5 = Trustworthy	Interval
	Q3_5	1	Credibility	1 = Not credible 5 = Credible	Interval
Q4	Q4_1 – Q4_5	5	Facebook LinkedIn Twitter YouTube Blogs	0 = No 1 = Yes	Ordinal
Q4	Q4_6	Will be coded in MS word	Other social media		
Q5	Q5_1 – Q5_5	5	Social media communication influenced problem recognition stage Social media communication influenced information search Social media communication influenced evaluation of alternatives stage Social media communication influenced choice stage Social media communication influenced consideration throughout entire decision making process	1 = No influence 2 = Some influence 3 = Quite a lot of influence 4 = A great deal of influence 5 = A very great deal of influence	Interval
Q6	Q6_1 – Q6_4	9	Weight of opinions on social media Impact of social media on thinking about universities to attend Social media influence criteria in final decision Involvement of social media have on rating of options	1 = Very small influence 2 = Small influence 3 = Somewhat of an influence 4 = Large influence 5 = Very large influence	Interval

Question number	Variable name	Columns in dataset for entire question	Variable labels	Value codes and value labels	Measure type
	Q6_5 – Q6_9	9	Social media influence others into adopting positions about various options Social media changed preferences Went along with suggestions on social media Social media influence decision Final decision reflect views on social media	1 = Very small influence 2 = Small influence 3 = Somewhat of an influence 4 = Large influence 5 = Very large influence	Interval
Q7	Q7_1 – Q7_16	16	Stay in touch View: Pictures and videos Make appointments Share: Pictures and videos Search: new contacts Search: info about study Search: Info about university Search: Info about school Read: Product reviews Share: Opinions on forums Review: Purchased products Share: Experiences on blogs Subscribe: RSS Vote Share information: sport/hobby Share information: Universities	1 = Never use 2 = Rarely use 3 = Sometimes use 4 = Often use 5 = Always use	Interval
Q8	Q10	5	Access times per day	1 = None 2 = 1 – 3 times per day 3 = 4 – 6 times per day 4 = 7 – 9 times per day 5 = 10 or more times per day	Ordinal
Q9	Q11	6	Hours per day	1 = No time 2 = Less than 1 hour per day 3 = 1 – 3 hours per day 4 = 4 – 6 hours per day 5 = 7 – 9 times per day 6 = 10 or more hours per day	

Question number	Variable name	Columns in dataset for entire question	Variable labels	Value codes and value labels	Measure type
Q10	Q12_1 – 12_6	6	Access: Cellphone Access: Tablet Access: Personal computer Access: Work computer Access: Public computer Access: Don't access	0 = No 1 = Yes	Ordinal
Q11	Q8	2	Respondent gender	1 = Male 2 = Female	Nominal
Q12	Q9	8	Respondent age	1 = 18 – 20 years 2 = 21 – 25 years 3 = 26 – 30 years 4 = 31 – 35 years 5 = 36 – 40 years 6 = 41 – 45 years 7 = 46 – 50 years 8 = Older than 50 years	Ordinal

-ANNEXURE D-
DESCRIPTIVE STATISTICS:
QUESTIONS 7 – 12

This annexure contains the descriptive statistics of question 7 – 12 that was not included in the body of the document.

**QUESTION 7:
SOCIAL MEDIA USAGE (SECTION 6.3.7)**

The descriptive statistics of each item in the social media usage scale was calculated and analysed in section 6.3.7.1 – 6.3.7.11. Please see these descriptive statistics below.

Stay in touch

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	11	7.1	7.1	7.1
	Rarely use	19	12.2	12.2	19.2
	Sometimes use	51	32.7	32.7	51.9
	Often use	50	32.1	32.1	84.0
	Always use	25	16.0	16.0	100.0
	Total	156	100.0	100.0	

View: Pictures and videos

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	13	8.3	8.3	8.3
	Rarely use	19	12.2	12.2	20.5
	Sometimes use	40	25.6	25.6	46.2
	Often use	64	41.0	41.0	87.2
	Always use	20	12.8	12.8	100.0
	Total	156	100.0	100.0	

Make appointments

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	40	25.6	25.6	25.6
	Rarely use	44	28.2	28.2	53.8
	Sometimes use	31	19.9	19.9	73.7
	Often use	30	19.2	19.2	92.9
	Always use	11	7.1	7.1	100.0
	Total	156	100.0	100.0	

Share: Pictures and videos

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	18	11.5	11.5	11.5
	Rarely use	23	14.7	14.7	26.3
	Sometimes use	45	28.8	28.8	55.1
	Often use	49	31.4	31.4	86.5
	Always use	21	13.5	13.5	100.0
	Total	156	100.0	100.0	

Search: new contacts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	32	20.5	20.5	20.5
	Rarely use	46	29.5	29.5	50.0
	Sometimes use	44	28.2	28.2	78.2
	Often use	23	14.7	14.7	92.9
	Always use	11	7.1	7.1	100.0
	Total	156	100.0	100.0	

Search: info about study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	31	19.9	19.9	19.9
	Rarely use	20	12.8	12.8	32.7
	Sometimes use	37	23.7	23.7	56.4
	Often use	35	22.4	22.4	78.8
	Always use	33	21.2	21.2	100.0
	Total	156	100.0	100.0	

Search: Info about university

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	36	23.1	23.1	23.1
	Rarely use	21	13.5	13.5	36.5
	Sometimes use	36	23.1	23.1	59.6
	Often use	34	21.8	21.8	81.4
	Always use	29	18.6	18.6	100.0
	Total	156	100.0	100.0	

Search: Info about school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	49	31.4	31.4	31.4
	Rarely use	28	17.9	17.9	49.4
	Sometimes use	26	16.7	16.7	66.0
	Often use	33	21.2	21.2	87.2
	Always use	20	12.8	12.8	100.0
	Total	156	100.0	100.0	

Read: Product reviews

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	36	23.1	23.1	23.1
	Rarely use	35	22.4	22.4	45.5
	Sometimes use	31	19.9	19.9	65.4
	Often use	31	19.9	19.9	85.3
	Always use	23	14.7	14.7	100.0
	Total	156	100.0	100.0	

Share: Opinions on forums

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	35	22.4	22.4	22.4
	Rarely use	37	23.7	23.7	46.2
	Sometimes use	34	21.8	21.8	67.9
	Often use	30	19.2	19.2	87.2
	Always use	20	12.8	12.8	100.0
	Total	156	100.0	100.0	

Review: Purchased products

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	49	31.4	31.4	31.4
	Rarely use	28	17.9	17.9	49.4
	Sometimes use	34	21.8	21.8	71.2
	Often use	30	19.2	19.2	90.4
	Always use	15	9.6	9.6	100.0
	Total	156	100.0	100.0	

Share: Experiences on blogs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	73	46.8	46.8	46.8
	Rarely use	31	19.9	19.9	66.7
	Sometimes use	26	16.7	16.7	83.3
	Often use	17	10.9	10.9	94.2
	Always use	9	5.8	5.8	100.0
	Total	156	100.0	100.0	

Subscribe: RSS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	91	58.3	58.3	58.3
	Rarely use	27	17.3	17.3	75.6
	Sometimes use	21	13.5	13.5	89.1
	Often use	11	7.1	7.1	96.2
	Always use	6	3.8	3.8	100.0
	Total	156	100.0	100.0	

Vote

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	64	41.0	41.0	41.0
	Rarely use	33	21.2	21.2	62.2
	Sometimes use	31	19.9	19.9	82.1
	Often use	15	9.6	9.6	91.7
	Always use	13	8.3	8.3	100.0
	Total	156	100.0	100.0	

Share information: sport/hobby

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	51	32.7	32.7	32.7
	Rarely use	34	21.8	21.8	54.5
	Sometimes use	32	20.5	20.5	75.0
	Often use	26	16.7	16.7	91.7
	Always use	13	8.3	8.3	100.0
	Total	156	100.0	100.0	

Share information: Universities

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Never use	56	35.9	35.9	35.9
	Rarely use	26	16.7	16.7	52.6
	Sometimes use	26	16.7	16.7	69.2
	Often use	29	18.6	18.6	87.8
	Always use	19	12.2	12.2	100.0
Total		156	100.0	100.0	

SOCIAL MEDIA USAGE IN DIFFERENT AGE CATEGORIES (SECTION 6.3.8)

Case Processing Summary

	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Total social media usage * Two age groups final	155	99.4%	1	0.6%	156	100.0%
Total entertainment * Two age groups final	155	99.4%	1	0.6%	156	100.0%
Total information seeking * Two age groups final	155	99.4%	1	0.6%	156	100.0%
Total information adding * Two age groups final	155	99.4%	1	0.6%	156	100.0%

Report

		Total entertainment	Total information seeking	Total information adding
Two age groups final				
18 – 30 years	Mean	3.0098	2.7195	2.3101
	N	82	82	82
	Std. Deviation	.87596	1.21360	1.09208
31 years and older	Mean	3.0356	3.0993	2.4168
	N	73	73	73
	Std. Deviation	1.00904	1.33056	1.01875
Total	Mean	3.0219	2.8984	2.3604
	N	155	155	155
	Std. Deviation	.93796	1.28006	1.05612

QUESTION 8:

NUMBER OF TIMES STUDENTS ACCESS SOCIAL MEDIA PER DAY (SECTION 6.3.9)

The descriptive statistics for the number of times social media is accessed per day was calculated and provided in graph format in this section. Please see the descriptive statistics pertaining to this question below.

Statistics

Access Times per Day

N	Valid	153
	Missing	3

Access Times per Day

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	None	12	7.7	7.8	7.8
	1 - 3 times per day	72	46.2	47.1	54.9
	4 - 6 times per day	35	22.4	22.9	77.8
	7 - 9 times per day	7	4.5	4.6	82.4
	10 or more times per day	27	17.3	17.6	100.0
	Total	153	98.1	100.0	
Missing	System	3	1.9		
Total		156	100.0		

QUESTION 9:

HOURS A DAY STUDENTS SPEND ON SOCIAL MEDIA (SECTION 6.3.10)

The descriptive statistics for the number of hours a day students spend on social media was calculated and provided in graph format in this section. Please see the descriptive statistics pertaining to this question below.

Statistics

Hours per day

N	Valid	154
	Missing	2

Hours per day

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	.6	.6	.6
	No time	14	9.0	9.1	9.7
	Less than 1 hour per day	8	5.1	5.2	14.9
	1 - 3 hours per day	107	68.6	69.5	84.4
	4 - 6 hours per day	17	10.9	11.0	95.5
	7 - 9 hours per day	4	2.6	2.6	98.1
	10 or more hours per day	3	1.9	1.9	100.0
	Total	154	98.7	100.0	
Missing	System	2	1.3		
Total		156	100.0		

QUESTION 10:

DEVICES STUDENTS USE TO ACCESS SOCIAL MEDIA (SECTION 6.3.11)

The descriptive statistics for the devices students use to access social media was calculated and provided in graph format in this section. Please see the descriptive statistics pertaining to this question below.

Statistics

		Access:Cellphone	Access: Tablet	Access: Personal computer	Access: Work comptuer	Access: Public computer	Access: Dont access
N	Valid	156	156	156	156	156	156
	Missing	0	0	0	0	0	0

Access:Cellphone

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	26	16.7	16.7	16.7
	Yes	130	83.3	83.3	100.0
	Total	156	100.0	100.0	

Access: Tablet

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	121	77.6	77.6	77.6
	Yes	35	22.4	22.4	100.0
	Total	156	100.0	100.0	

Access: Personal computer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	59	37.8	37.8	37.8
	Yes	97	62.2	62.2	100.0
	Total	156	100.0	100.0	

Access: Work comptuer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	105	67.3	67.3	67.3
	Yes	51	32.7	32.7	100.0
	Total	156	100.0	100.0	

Access: Public computer

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	148	94.9	94.9	94.9
	Yes	8	5.1	5.1	100.0
	Total	156	100.0	100.0	

Access: Dont access

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	149	95.5	95.5	95.5
	Yes	7	4.5	4.5	100.0
	Total	156	100.0	100.0	

QUESTION 11 – 12:

RESPONDENT PROFILE: GENDER AND AGE (SECTION 6.2.2)

The descriptive statistics gender was calculated and provided in graph format in this section. Please see the descriptive statistics pertaining to this question below.

Statistics

		Gender	Age
N	Valid	156	156
	Missing	0	0

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	64	41.0	41.0	41.0
	Female	92	59.0	59.0	100.0
	Total	156	100.0	100.0	

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18 - 20 years	18	11.5	11.5	11.5
	21 -25 years	38	24.3	24.3	35.8
	26 - 30 years	27	17.3	17.3	53.1
	31 - 35 years	26	16.7	16.7	69.8
	36 - 40 years	26	16.7	16.7	86.5
	41 - 45 years	11	7.1	7.1	93.6
	46 - 50 years	7	4.5	4.5	98.1
	Older than 50 years	3	1.9	1.9	100.0
	Total	156	100.0	100.0	

-ANNEXURE E-
INFERENCEAL STATISTICS

This annexure contains the inferential statistics of question that was not included in the body of the document

PERCEIVED INFLUENCE VS ACTUAL INFLUENCE (SECTION 6.4.1)

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Honesty	115	3.52	1.172	-.352	.226	-.750	.447
Sincerity	120	3.48	1.243	-.455	.221	-.676	.438
Trustworthy	114	3.37	1.221	-.119	.226	-.984	.449
Credibility	119	3.33	1.215	-.194	.222	-.892	.440
Dependability	116	3.28	1.214	-.210	.225	-.754	.446
Valid N (listwise)	106						

Descriptive Statistics

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Total perceived credibility of social media	122	3.3945	1.08250	-.271	.219	-.677	.435
Valid N (listwise)	122						

ASSUMPTION OF NORMALITY

Case Processing Summary

		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Total perceived credibility of social media	Two age groups						
	Generation Y	65	79.3%	17	20.7%	82	100.0%
	Generation X and older	57	78.1%	16	21.9%	73	100.0%

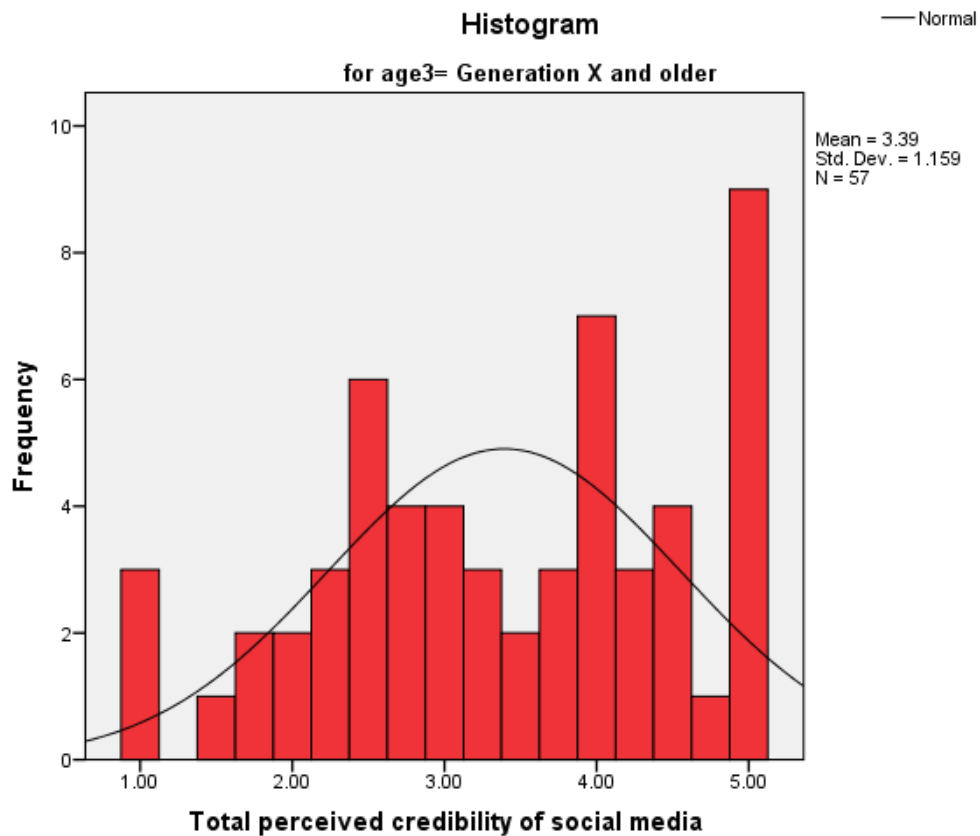
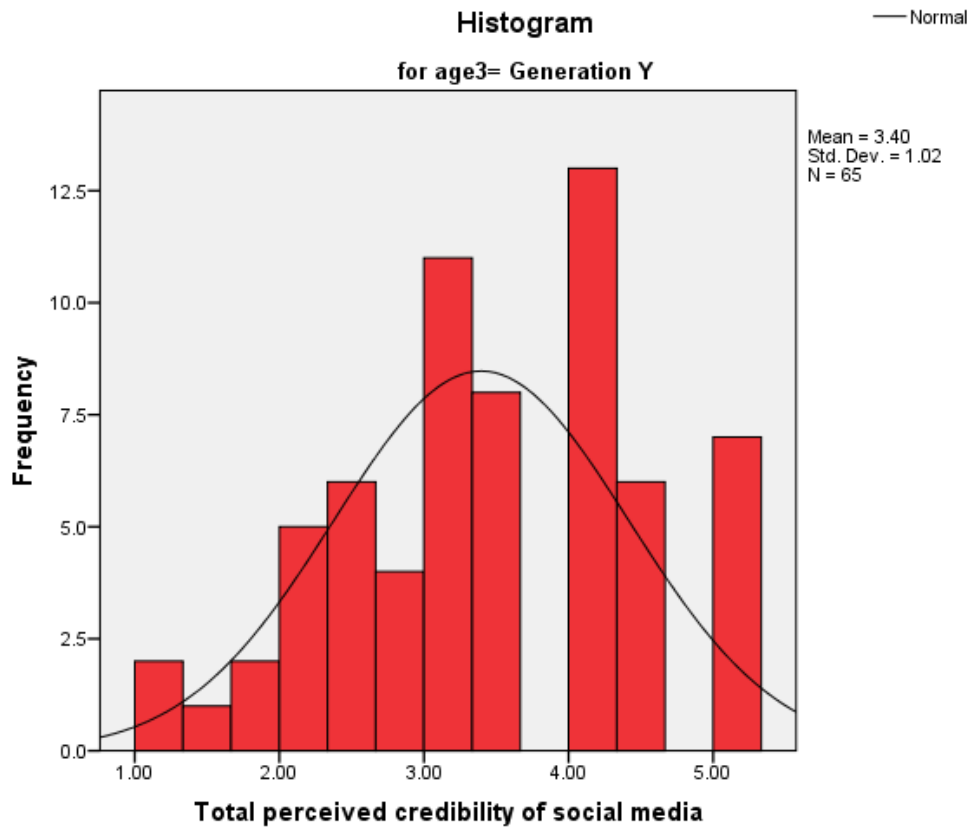
Descriptives

		Two age groups		Statistic	Std. Error
Total perceived credibility of social media	Generation Y	Mean		3.3959	.12650
		95% Confidence Interval for Mean	Lower Bound	3.1432	
			Upper Bound	3.6486	
		5% Trimmed Mean		3.4296	
		Median		3.4000	
		Variance		1.040	
		Std. Deviation		1.01988	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.50	
		Skewness		-.291	.297
		Kurtosis		-.477	.586
	Generation X and older	Mean		3.3930	.15351
		95% Confidence Interval for Mean	Lower Bound	3.0855	
			Upper Bound	3.7005	
		5% Trimmed Mean		3.4366	
		Median		3.4000	
		Variance		1.343	
		Std. Deviation		1.15895	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
Interquartile Range		1.73			
Skewness		-.257	.316		
Kurtosis		-.842	.623		

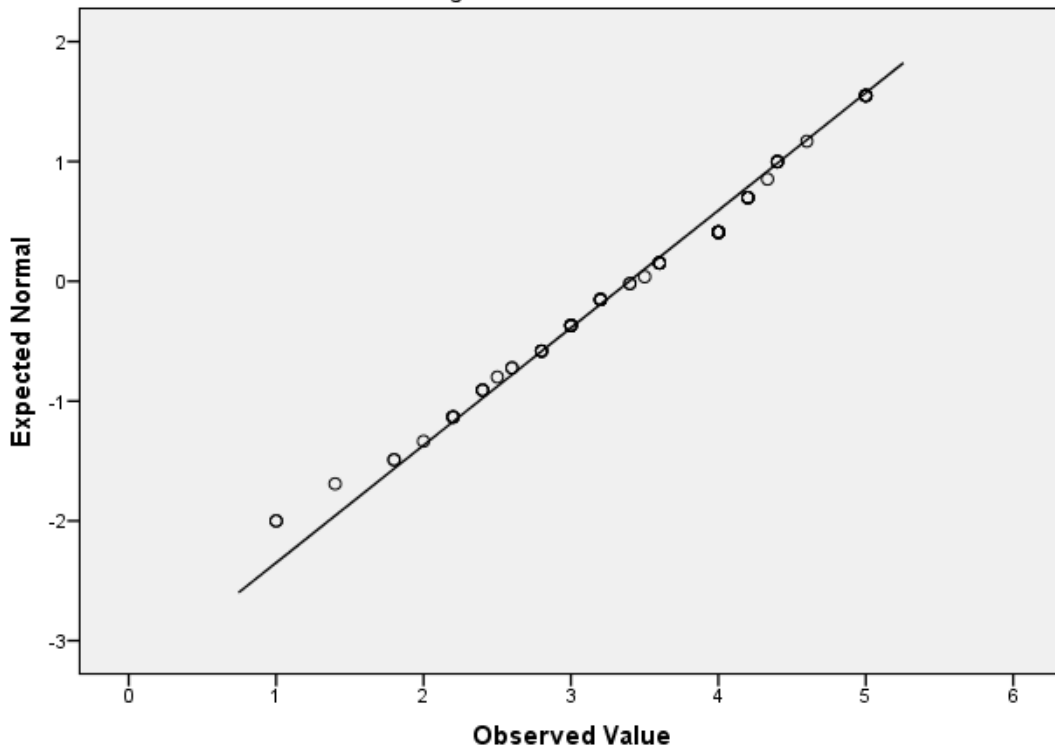
Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Total perceived credibility of social media	Generation Y	.123	65	.016	.967	65	.083
	Generation X and older	.121	57	.037	.947	57	.014

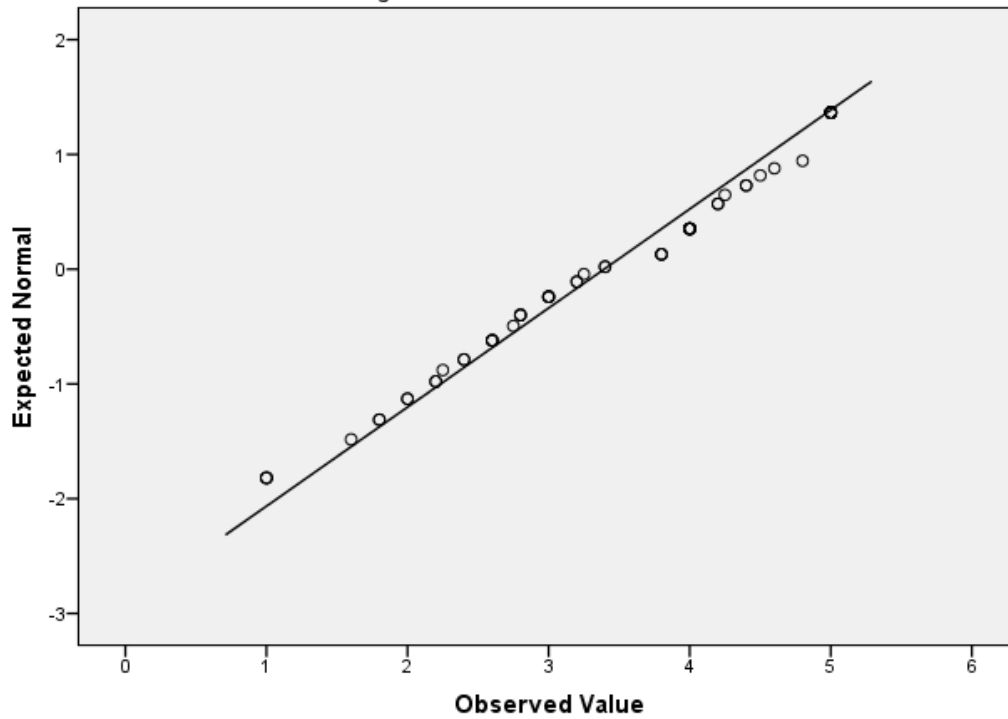
a. Lilliefors Significance Correction



Normal Q-Q Plot of Total perceived credibility of social media
for age3= Generation Y



Normal Q-Q Plot of Total perceived credibility of social media
for age3= Generation X and older



QUESTION 7: SOCIAL MEDIA USAGE (SECTION 6.4.2)

Case Processing Summary

		Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
Total social media usage	18 – 30 years old	82	98.8%	1	1.2%	83	100.0%
	31 years and older	73	100.0%	0	0.0%	73	100.0%

Descriptives

		Two age groups final		Statistic	Std. Error
Total social media usage	18 – 30 years old	Mean		2.6311	.10281
		95% Confidence Interval for Mean		Lower Bound	2.4265
				Upper Bound	2.8357
		5% Trimmed Mean		2.6108	
		Median		2.4688	
		Variance		.867	
		Std. Deviation		.93100	
		Minimum		1.00	
		Maximum		5.00	
		Range		4.00	
		Interquartile Range		1.33	
		Skewness		.363	.266
		Kurtosis		-.394	.526
		31 years and older	31 years and older	Mean	
95% Confidence Interval for Mean				Lower Bound	2.5558
				Upper Bound	3.0058
5% Trimmed Mean				2.7667	
Median				2.6875	
Variance				.930	
Std. Deviation				.96432	
Minimum				1.00	
Maximum				5.00	
Range				4.00	
Interquartile Range				1.47	
Skewness				.060	.281
Kurtosis				-.554	.555

Statistical test for Normality

Tests of Normality

	Two age groups final	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
Total social media usage	18 – 30 years old	.086	82	.200 [*]	.976	82	.127
	31 years and older	.069	73	.200 [*]	.978	73	.239

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Parametric T-Test

Group Statistics

	Two age groups final	N	Mean	Std. Deviation	Std. Error Mean
Total social media usage	18 – 30 years old	82	2.6311	.93100	.10281
	31 years and older	73	2.7808	.96432	.11287

Independent Samples Test

	Levene's Test for Equality of Variances	t-test for Equality of Means								
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Total social media usage	Equal variances assumed	.166	.684	-.983	153	.327	-.14972	.15236	-.45072	.15127
	Equal variances not assumed			-.981	149.540	.328	-.14972	.15267	-.45140	.15195

**-ANNEXURE F-
RELIABILITY TESTS**

This annexure contains the reliability test that was not included in the body of the document.

PERCEIVED CREDIBILITY (SECTION 6.5.1)

Case Processing Summary

		N	%
Cases	Valid	107	68.6
	Excluded ^a	49	31.4
	Total	156	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.928	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Sincerity	13.37	19.991	.692	.935
Honesty	13.39	19.109	.852	.905
Dependability	13.62	18.918	.824	.910
Trustworthy	13.54	18.402	.873	.900
Credibility	13.59	18.886	.823	.910

PERCEIVED INFLUENCE OF SOCIAL MEDIA (SECTION 6.5.2)

Case Processing Summary

		N	%
Cases	Valid	156	100.0
	Excluded ^a	0	.0
	Total	156	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.968	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Social media communication influenced problem recognition stage	10.01	27.574	.890	.963
Social media communication influenced information search stage	9.78	27.014	.884	.964
Social media communication influenced evaluation of alternatives stage	9.81	26.737	.931	.956
Social media communication influenced choice stage	9.87	26.350	.920	.958
Social media communication influenced consideration throughout entire decision making process	9.95	26.965	.913	.959

ACTUAL INFLUENCE OF SOCIAL MEDIA (SECTION 6.5.3)

Case Processing Summary

		N	%
Cases	Valid	156	100.0
	Excluded ^a	0	.0
	Total	156	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.982	9

Item-Total Statistics

	Scale Mean if Item	Scale Variance if	Corrected Item-Total	Cronbach's Alpha if
	Deleted	Item Deleted	Correlation	Item Deleted
Weight of opinions on social media	19.48	102.548	.906	.980
Impact of social media on thinking about universities to attend	19.47	101.528	.940	.979
Social media influence criteria in final decision	19.49	101.206	.929	.979
Involvement of social media have on rating of options	19.51	102.664	.932	.979
Social media influence others into adopting positions about various options	19.47	105.283	.845	.983
Social media changed preferences	19.52	102.483	.899	.981
Went along with suggestions on social media	19.63	103.150	.933	.979
Social media influence decision	19.56	102.312	.942	.979
Final decision reflect views on social media	19.51	101.606	.931	.979

SOCIAL MEDIA USAGE (SECTION 6.5.4)

Case Processing Summary

		N	%
Cases	Valid	156	100.0
	Excluded ^a	0	.0
	Total	156	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.941	16

Item-Total Statistics

	Scale Mean if Item	Scale Variance if Item	Corrected Item-Total	Cronbach's Alpha if
	Deleted	Deleted	Correlation	Item Deleted
Stay in touch	39.76	208.969	.589	.940
View: Pictures and videos	39.76	212.401	.475	.942
Make appointments	40.60	203.841	.660	.938
Share: Pictures and videos	39.94	206.241	.624	.939
Search: new contacts	40.56	205.268	.667	.938
Search: info about study	40.02	199.051	.704	.937
Search: Info about university	40.15	197.623	.734	.936
Search: Info about school	40.48	196.393	.762	.936
Read: Product reviews	40.33	196.830	.782	.935
Share: Opinions on forums	40.38	198.185	.772	.936
Review: Purchased products	40.56	196.325	.812	.935
Share: Experiences on blogs	41.05	201.417	.728	.937
Subscribe: RSS	41.33	207.875	.601	.939
Vote	40.91	204.392	.617	.939
Share information: sport/hobby	40.68	203.019	.646	.939
Share information: Universities	40.60	196.358	.758	.936

SOCIAL MEDIA USAGE: ENTERTAINMENT SUB DIMENSION

Case Processing Summary

		N	%
Cases	Valid	156	100.0
	Excluded ^a	0	.0
	Total	156	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.859	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Stay in touch	11.71	15.112	.651	.837
View: Pictures and videos	11.71	14.893	.677	.830
Make appointments	12.54	14.030	.675	.831
Share: Pictures and videos	11.88	13.850	.751	.810
Search: new contacts	12.50	14.858	.632	.841

SOCIAL MEDIA USAGE: INFORMATION ADDING SUB DIMENSION

Case Processing Summary

		N	%
Cases	Valid	156	100.0
	Excluded ^a	0	.0
	Total	156	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.909	7

Item-Total Statistics

	Scale Mean if Item	Scale Variance if Item	Corrected Item-Total	Cronbach's Alpha if
	Deleted	Deleted	Correlation	Item Deleted
Share: Opinions on forums	13.71	39.949	.763	.891
Review: Purchased products	13.90	39.667	.769	.890
Share: Experiences on blogs	14.38	40.535	.780	.890
Subscribe: RSS	14.67	43.424	.656	.903
Vote	14.24	41.153	.706	.897
Share information: sport/hobby	14.01	40.903	.711	.897
Share information: Universities	13.93	39.769	.704	.898

SOCIAL MEDIA USAGE: INFORMATION SEEKING SUB DIMENSION

Case Processing Summary

		N	%
Cases	Valid	156	100.0
	Excluded ^a	0	.0
	Total	156	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.924	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Search: info about study	8.46	14.934	.838	.897
Search: Info about university	8.59	14.463	.883	.882
Search: Info about school	8.92	15.078	.801	.910
Read: Product reviews	8.78	15.646	.778	.917