

**Information behaviour of Generation Y students at the University
of the Western Cape, Cape Town**

By

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A mini-thesis submitted in partial fulfilment of the requirements for the degree of
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DECLARATION

I Sanele S'lungile Dlamini declare that the thesis entitled *Information behaviour of Generation Y students at the University of the Western Cape, Cape Town* is my own work. It has not been submitted for any other degree or assessment at any university. All the sources that have been used or quoted have been indicated and acknowledged by means of complete references.

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ACKNOWLEDGEMENT

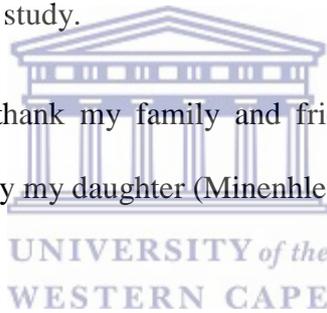
I would like to acknowledge the following people who made this thesis a success.

Firstly I would like to acknowledge my Heavenly Father for giving me strength, courage, guidance and wisdom to be able to complete my thesis.

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ABSTRACT

The project examined the information seeking behaviour of Generation Y students at the University of the Western Cape (UWC). The Internet has evidently become an integral part of this generation's everyday life. The contributing factor to this is that Generation Y has been brought up in a high technology society. The Internet in conjunction with information and communication technology tools is used by Generation Y for different purposes during information seeking. Internet can be used for communication, acquiring information sources or as channels for disseminating information. Therefore, looked at was the role and impact of the Internet and information technology on Generation Y's information behaviour; if there was a positive or negative effect on them. Literature has indicated that Generation Y is constantly connected to the Internet, great user of social media and relies on the web for their information needs. This study employed Savolainen's Everyday Life Information Seeking model (ELIS) and Pettigrew's Information Grounds theory as theoretical frameworks. The models involve unsystematic ways of acquiring information for daily activities that can be work or non-work related. The study was based on academic and non-academic information needs of Generation Y in order to establish a holistic understanding of their everyday information needs and seeking. The study was carried out at the UWC campus. Also reflected was how the university has adapted in the provision of services that meet the Generation Y student's information needs. The research was based on mixed method approach, thus combining qualitative and quantitative methods. Findings of the study revealed that Generation Y students at UWC have been exposed to the use of technology at a later stage yet, they revealed similar characteristics as mentioned by different authors from the other parts of the world. The students relied on ICTs and the Internet for all their information behaviour.

KEYWORDS:

Generation Y

University of the Western Cape

Information behaviour

Undergraduate students

Information and communication technologies

ELIS Model

Pettigrew's Information Grounds Theory



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LIST OF ACRONYMS

ELIS	Everyday Life Information Seeking
ICT	Information and Communication Technology
IM	Instant Messaging
MP3	Media Player
UWC	University of the Western Cape
CPUT	Cape Peninsula University of Technology

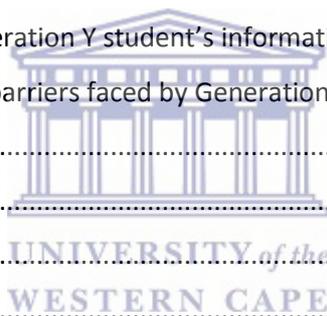


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CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 Introduction

The fast development of Information and Communication Technologies (ICTs) inspired the researcher to be concerned with how Generation Y students interact with information available through the networked environment in order to satisfy an information need. The networked information environment is linked to digital communication practices, which is part of Generation Ys' culture in terms of shaping how they locate, share and use information. A Generation Y uses digital communication which entails the ability to create persuasive interaction in different media found on the Internet. However, this study was more concerned with their everyday life information seeking skills as well as evaluating retrieved information. Emphasis will be on how Generation Y students seek information on academic and social life when using technology in their everyday lives and places or spaces where they acquire information. Studying the information behaviour of this group might contribute to future development of services that are offered by the university in support of the students' information needs.

The study examined the following:

- The characteristics of a Generation Y information seeker.
- The information seeking behaviour of Generation Y in their everyday lives.
- The challenges encountered during information seeking by Generation Y students.
- Information grounds used by Generation Y students.

1.2 Rationale for the study

According to the World Stats (2012), the Internet diffusion in the Republic of South Africa is 17.4% and there are 2 400 000 Internet users. South Africa ranks

at number five in the top ten Internet countries in Africa. Ajiboye and Tella (2007, p. 40) mentioned that, in most African countries the Internet and other information and communication technologies (ICTs) are not fully grasped. Internet is one of the dominating sources of information since more people are relying on it for their daily information needs.

Despite the fact that it has been historically regarded as an underprivileged university, the University of the Western Cape (UWC) is one of the recognised universities in South Africa and Africa. UWC has a history of a creative struggle against oppression, discrimination and disadvantage. According to the Webmetrics ranking (2012), UWC is ranked as the seventh best in South Africa and in Africa.

According to King (2007, p. 60), due to inadequate schooling and limited access to resources, the majority of students enrolling at the University of the Western Cape have been deprived of even basic library and information skills that are expected from them and most had limited access to ICTs prior to becoming a student. This resulted mainly because of the political background of the Republic of South Africa (RSA). The purpose of a university is to provide a suitable environment that will equip individuals to fulfil private pedagogy ambitions. The digital environment has led to changes in creation, storage, distribution, access and delivery of information. Part of the UWC mission states that, “the University of the Western Cape strives to be a place of quality and a place to grow” (UWC Website, 2013). The UWC Information and Communication services (ICS) has assisted in the transformation of a digital campus by providing wireless Internet connection (‘Free4all’), thus making it easier to access the Internet.

Generation Y is known to have integrated technology into their everyday lives. They have grown up with the Internet and mobile communications. They cannot imagine the world without technology. The impact of technology on this generation is significant. They are digitally, globally and constantly connected and have an increasing reliance on technology in their information lives. Generation Ys are visually oriented and bored easily. Sheesley (2002, p. 27) found that they

easily run out of patience and are lazy. This generation wants to get what they want as quickly as possible. They have zero tolerance for delays (Sheesley, 2002, p. 36).

Holliday & Qin (2004, p.360), Niles (2011, p. 49) as well as Zimmerman (2012, p. 174) emphasised that because Generation Y students prefer quick information, they have intensive experience using the World Wide Web as their primary information source and will therefore use search engines such as Google, Yahoo and Bing instead of doing database searches to find needed information. This is reflected in the fact that information resources cited by students in academic work are mostly Internet sources. Rowlands, Nicholas, Williams, Huntington & Fieldhouse (2008, p. 300) refer to them as “cut-and-paste” generation, since there is a lot of sketchy evidence and plagiarism is a big issue. To accommodate these students, academic libraries as information providers, have to find ways to incorporate methods that are used in search engines and apply them on library databases.

Generation Y should be aware that not all information sources available on the Internet are accurate and trustworthy, because any one is free to deposit anything there. Therefore, evaluating the trustworthiness and accuracy of information sources is weighty. According to Reigh & Hilligoss (2008, p. 54), Generation Y students accept information without questioning its credibility. The authors state that Generation Y stop searching at “good enough” material rather than trying to find the best sources. It is not always easy to decide whether information obtained was suitable. Techniques that assist in the evaluation of information source include currency, credibility (author’s credentials), reputable publisher, authority and intended audience.

Definitions for Generation Y vary because of different political, social, economic and cultural backgrounds. There have been various dates suggested for Generation Y or Digital natives’ birth years. According to Jones & Shao (2011, p. 22), in America they are born between 1983 and 2001, Europe 1985 and 2001 and in Japan 1986 and 2001. According to Goneos-Malka (2011, p. 173), Generation Y

individuals in the South African context are born between the years 1980 and 2001. Since most of the students at UWC come from deprived backgrounds, not all of them are part of Generation Y. They have not been exposed to ICTs since birth.

According to Smith (2010), many of the Generation Y kids are the first generation of South Africa to have benefited from the political change. They are referred to as “model C” kids, meaning the children who were able to attend private or model C schools. Some were born after the end of apartheid or just before it ended. These model C schools were established and traditionally used by white South Africans. According to Czerniewicz & Brown (2010, p. 357), in the South African context, digital natives or Generation Ys are not characterized by their age, but by their experience in the use of ICTs, their attitude towards technology and the opportunities they had in accessing ICTs.

Therefore a South African Generation Y is must usually be born between 1980 and 2001 (currently aged between 13 and 34) and must usually have a positive attitude towards as well as opportunities and experience in using ICTs. The study explored whether information behaviour of UWC students correlates to those of Generation Ys. It concentrated on their information needs, how they interact with information sources, the different places of interest where they gain information and how their information seeking is influenced by ICTs since they are known to be digital natives.

1.3 Theoretical framework

Introduction

Information behaviour is the currently preferred term used to describe many ways in which people interact with information, in particular, the way in which people seek and utilize information (Bates, 2009: 2381). There have been various models developed for information behaviour. To mention a few, these models include: Wilson’s theory of information behaviour, everyday life information seeking

(ELIS) model by Savolainen, Pettigrew's information grounds theory, Kuhlthau's information search process, Dervin's sense making model, and Ellis' behavioural model of information seeking. These models intend to allow description and explanation of the users' information behaviour.

The Everyday Life Information Seeking (ELIS) model by Savolainen and Pettigrew's Information Grounds theory were used as theoretical frameworks for this research project. Both theories indicate that an individual seeks information consciously when having a problem to solve or unconsciously as one sees and hears information in different environments.

Since Pettigrew used Savolainen's 1997 social constructionist approach to define information grounds, the researcher believed that merging ELIS and Information grounds theories would clearly identify information behaviour of the UWC students. The researcher opted for these theories based on Generation Ys characteristics presented in the following chapter. Briefly, what was gathered from previous research was that Generation Y has undirected search strategies and takes advantage of what is easily available. According to the theories information may be gained in formal and informal places, hence Generation Ys seem to be a unpredictable group and their information needs might not be articulated explicitly.

1.3.1 The Savolainen Model

Savolainen (2009, p. 1781) defines the concept of ELIS as "the acquisition of various informational (cognitive and expressive) elements which people employ to orient themselves in daily life or to solve problems not directly connected and the performance of professional task". The author goes on to say that the key words in this model are "everyday life", which refer to a set of attributes characterizing relatively stable and recurrent qualities of work and free time activities.

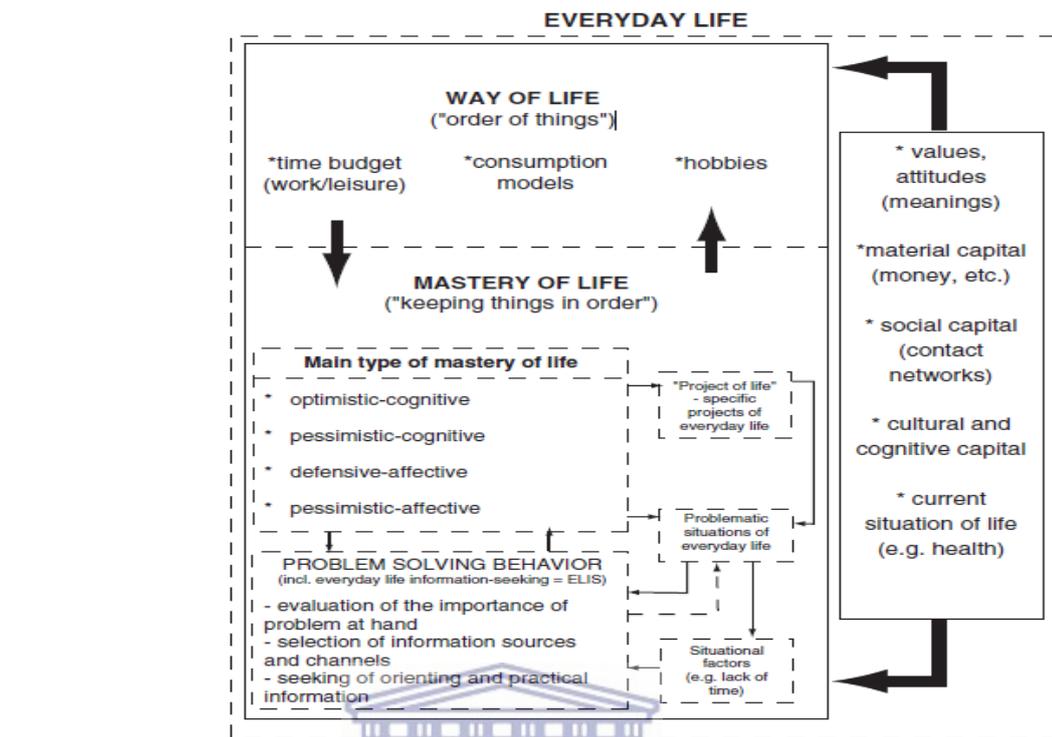


Figure 1: Savolainen Everyday Life Information Seeking model (Savolainen, 1995)

The model refers to a set of attributes characterizing relatively stable and recurrent qualities of both work and free time activities. According to this model, information seeking may occur in work related and leisure-related context of an individual's everyday life. The ELIS model is about how people perceive the information world around them and criteria used to accept or reject information in everyday life. Included in ELIS model are both concepts of cognitive and expressive elements which people employ to orient themselves in their daily life to solve problems, not directly connected with the performance of occupational task (Savolainen, 2009, p.1781).

Since Generation Y is exposed to the Internet, it was essential for the researcher to explore the criteria used in accepting and rejecting information during their information seeking behaviour (Savolainen & Karri, 2004, p. 219). With the ELIS model, information acquisition usually takes place in less clearly defined contexts and in various activities (Savolainen, 2009, p. 1781). This means that

more information is gained unconsciously and not in a systematic manner. Case (2007, p. 130) emphasises that with the ELIS model, much information behaviour takes place in non-work settings such as in the pursuit of hobbies. The ELIS model has two main concepts, which are *way of life* and *mastery of life* as illustrated in Figure 1 above (Savolainen, 1995, p. 259).

Savolainen (1995, p.259 & 2009, p. 1784) defines way of life as a “scientific concept which provides a broad context to investigate individual and social factors affecting everyday life information seeking”. The author even uses the phrase ‘order of things’, which is associated with the choices that individuals make. ‘Things’ is a term used for the various activities taking place in the daily life world, including academic work, household tasks and voluntary activities (e.g. hobbies). ‘Order’ refers to the preferences given to these activities; it is the way of organizing one’s everyday life (Savolainen, 2009, p.1784). Therefore, the concept of ‘way of life’ is about how people make sense to operate in their daily world and what they consider to be normal in the engagement of their daily tasks. It includes the structure of time budget (working and leisure time); models of consumption of goods and services and the nature of hobbies.

Mastery of life is a general preparedness to approach everyday problems in certain ways. These ways are aligned with personal values (Savolainen, 2009, p. 1785). It describes the individual’s ability to maintain an acceptable level of satisfaction with the way of life they have established. Mastery of life can be either passive or active. Passive mastery is when people are satisfied with everything since it is going on as expected while active mastery of life is associated with realistic problem solving in cases where the order (preference) has been shaken. Therefore, information seeking is critical to mastery of life, as it closes the gap between how things are and how things should be. Mastery of life includes one’s tendency to adopt a particular information seeking strategy to solve problems. ELIS takes into account both the cognitive and affective nature of information seeking. This study looked at information seeking strategies applied by Generation Ys in solving problems or attending to their information needs.

1.3.2 Pettigrew's Information Grounds Theory

This theory is also known as the Fisher's theory of information grounds. Pettigrew's information grounds theory was proposed by Fisher in the late 1990s (Fisher, Landry & Naumer, 2006, p. 291). According to Fisher, Naumer, Durrance, Stromski & Christiansen (2005, p. 223), Pettigrew used Touminen and Savolainen's (1997) social constructionist approach to define information grounds. It has been stated by the authors that information grounds were developed to describe social settings in which people share everyday information.

Pettigrew (1999, p. 811) defines information grounds as "synergistic environment(s) temporarily created when people come together for a singular purpose but from whose behaviour emerges a social atmosphere that fosters the spontaneous and serendipitous sharing of information". However, information grounds can be formal or informal places people go to for a particular reason. These places can be where people usually hang-out, such as: coffee shops, restaurants, playgrounds, hair salons, schools, and workplaces. Hence, information grounds can emerge anywhere at any time.

According to Fisher, Durrance & Hinton (2004, p. 757) information grounds are used by people to engage in social interaction about specific situations. It can be formal or informal sharing of information on a range of topics and in multitude of directions. This information sharing can be scheduled like attending tutorials or accidental like meeting at the coffee shop. As people socially interact or casually chat, information sharing occurs unexpectedly. According to Counts & Fisher (2008, p.153), people's top information grounds are workplaces, activity groups such as fitness clubs or playgrounds and places of worship. Fisher et al (2005, p. 223) identified seven propositions of information grounds:

1. Information grounds can occur anywhere and are based on the presence of individuals.
2. People gather at information grounds for a primary, instrumental purpose other than information sharing.

3. Information grounds are attended by different social types, most if not all of whom play expected and important, albeit different, roles in information flow.
4. Social interaction is a primary activity such that information flow is a by-product.
5. People engage in formal and informal information sharing, and information flows in many directions.
6. People use information obtained at information grounds in alternative ways, and benefit along physical, social, affective and cognitive dimensions.
7. Many sub-contexts exist within an information ground and are based on people's perspectives and physical factors; together these sub-contexts form a grand context.

Figure 2 below shows these propositions summarized as eight concepts.

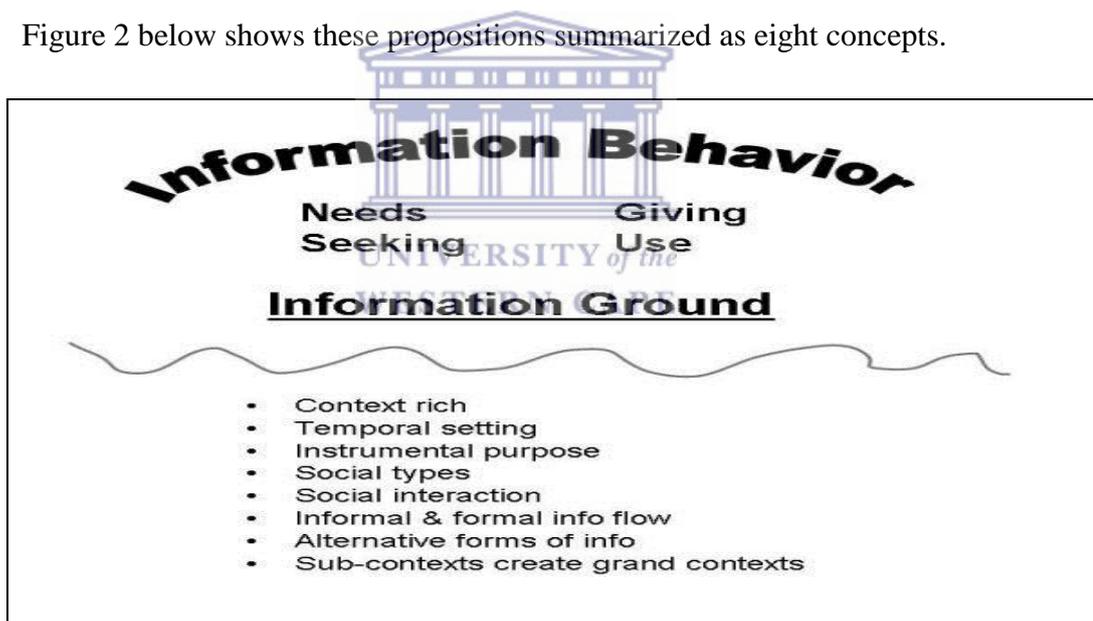


Figure 2: Pettigrew's Information Grounds Theory (Fisher, Durrance & Hinton, 2004, p. 758)

1.4 Research problem and questions

It is believed that Generation Y has integrated technology from the early stages of their lives. They need to stay informed and up to date with information that

pertain their life style and academic endeavours. A question then arises how the development of information communication technologies (ICTs) and Web 2.0 tools have influenced their information behaviour in their everyday lives as well as in their studies.

The Internet has been seen to be providing enormous amounts of information. Literature has confirmed the extensive use of Internet resources by Generation Y students. The critical aspect of this research was the impact of the Internet and ICTs on their everyday lives and on the information behaviour of Generation Y students. As Gross (2009, p. 5731) states, Generation Y uses the Internet for creating, retrieving and sharing of information using different forms of digital communication such as blogs and wikis. More specifically, the research problem dwelled on how Generation Y students at UWC identified their information needs, information grounds and sources that address their needs, how they locate and how they evaluate these sources and share information.

The purpose of a study is a concise, clear statement of the specific goal or aim of the study as well as the population and setting for the study (Babbie, 2011, p. 92). It should explain the final conclusions that the study hopes to reach and requires good research questions. The principal objective of this qualitative case study was to understand or describe information behaviour of Generation Y students at UWC. Both the ELIS model and Information grounds theory were used as theoretical framework. As it has been indicated by Czerniewicz & Brown (2010, p. 363), because they did not have access to technology and the Internet from an early age, not all South African students born between 1981 and 2001 could be regarded as digital natives. The purpose of the research was to examine how UWC Generation Y students address their information needs while using the networked environment (Internet and ICTs). To achieve the objective, this study raised interrelated questions which are as follows:

- What are the characteristics of a UWC Generation Y student?
- What are the everyday and academic information needs of Generation Y students at UWC?

- How do Generation Ys at UWC locate information for their everyday as well as for their academic information needs?
- How do Generation Y students at UWC evaluate retrieved information?
- How does the use of technology affect Generation Ys information seeking behaviour?
- What are Generation Y students' information grounds?
- What are the barriers faced by Generation Ys in their information seeking?

1.5 Research Methodology

1.5.1 Research procedure

This was a qualitative case study since the research was aimed to discover the underlying motives of human behaviour, in particular the information behaviour of Generation Y students. The University of the Western Cape was the research site for the project. There are approximately nine thousand (9 000) enrolled students at the UWC campus. According to the birth years of Generation Ys (1980 to 2001) most of them were anticipated to be at the university. The birth years for South African Generation Ys do not necessarily mean that all individuals born around these years have engaged with technology since birth.

Data was collected in two phases. A questionnaire was designed to assist the researcher in identifying students who are Generation Y. This questionnaire was used in the first phase of the research to assess how students have incorporated technology in their lives, their experience and attitude towards the use of ICT tools. The different characteristics of Generation Y were further used as questions to assist in identifying them. These questionnaires were completed by fifty-four randomly selected respondents on the UWC campus.

The second phase was interviews of a selected small number of students who qualified as being Generation Ys. Open-ended questions and closed questions based on the information behaviour of Generation Y students in their everyday

life as reflected by both the ELIS and Information Grounds theories were compiled to be used as interview guide.

1.6 Scope and limitations of the study

The study will provide characteristics of Generation Y students at UWC and how they effectively search for and use Internet and other sources for both their academic work and everyday life. It is also hoped that the study would provide information that would assist the University of the Western Cape – especially the library - to adjust and accommodate Generation Y students through the provision of quality information literacy programmes to help these students in searching, evaluating and using information to satisfy their information needs. The study gave insight on how to deal with the barriers that Generation Y students face when searching and using information for their academic work and everyday life.

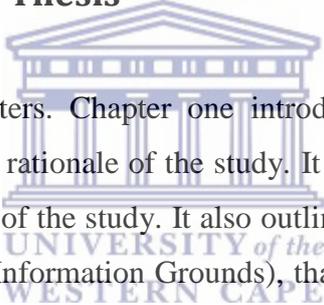
The main limitation of the study was that with the use of the two phases, it was not easy to determine the number of interviews to be carried out. This was because in the first phase the respondents were requested to write down their students numbers for the researcher to be able to do a follow up when they qualified for interviews. Some of the students gave non-existent students numbers, therefore making it difficult for the researcher to locate and invite them to take part in the interviews. Some of the students who were invited to participate in the interviews never responded to the invite. The criteria that Generation Y students had interacted with technologies since birth, was problematic to apply. This was because the majority of the respondents had not interacted with technology since birth. The researcher also needed to establish trust with the interviewee to ensure that rich in-depth information was gathered during the semi-structured interviews. The use of two phases was time consuming.

1.7 Ethical Principles

The researcher adhered at all times to the ethical guidelines of the Research Committee of the University of the Western Cape. The researcher respected the right to dignity, consent, privacy and confidentiality of the participants and therefore obtained informed consent from all the research participants. As no form of identity was required from the interview respondents, anonymity was insured.

Participation in this research project was voluntary and participants were allowed to withdraw at any stage of the research process or allowed not to answer some of the questions. As recordings of interviews were done to assist in the data analysis, permission to use a recorder was obtained.

1.8 Outline of the Thesis



The thesis has six chapters. Chapter one introduces the research project and provides background and rationale of the study. It presents and explores the main themes and key concepts of the study. It also outlines the conceptual analyses and both theories (ELIS and Information Grounds), that frame the study. Chapter two reviews and analyses existing and relevant research and literature on characteristics and information behaviour of Generation Y students. Chapter three describes the research design and methodology. It describes both the quantitative and qualitative approaches and the different data gathering methods. Chapter four presents and summarises the quantitative data gathered by the questionnaires. Chapter five presents and summarises qualitative data gathered from interviews. Chapter six concludes the discussion and attempts to answer the research questions regarding the information behaviour of Generation Y students at UWC. It also includes some recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This review is based on literature of studies across the world. Studies done in South Africa were emphasized.

Aspects of the topic identified in the literature are:

- Generation Y's characteristics
- Generation Y in South African context
- Generation Y and the use of social media
- Information needs of Generation Y students in their everyday life
- Information behaviour of Generation Y
- Information grounds

Useful overviews for this literature review are the major Joint Information Systems Committee (JISC) report, *The digital information seeker: report of findings from selected OCLC, RIN and JISC user behaviour projects* by Connaway & Dickey (2010) and the article in the Annual Review of Science and Technology, *Information behaviour* by Fisher & Julien (2009).

2.2 Characteristics of Generation Y

Several studies and literature have noted a pronounced shift of Generation Y's characteristics from the previous generations. Hence, it is essential to briefly summarize the characteristics ascribe to Generation Y. Characteristics such as values, attitude, personality traits or academic reputation. Different points of views have been identified by the researcher and will be discussed below.

2.2.1 Digital natives

Digital natives are called the digital natives, net generation, the Google generation, the millennials or iGeneration (Zimmerman, 2012, p. 175 and Prensky, 2001, p. 1). They are called by these terms because of the significance and importance of technology in their everyday lives. Having been born surrounded by these different technologies, Generation Y is known to have accessed computers and digital technology from an early age. Coombes (2009, p. 36) found that 86% of the respondents indicated that they could not live without their mobile phones while 91% frequently used the Internet on a daily basis.

They spend most of their time playing video games, chatting and surfing the Internet on their mobile phones and listening to music on MP3s. Generation Ys have more information in their heads and at their fingertips than the previous generations. Helsper & Enyon (2009, p. 503) argue that it is possible for adults to become digital natives by acquiring skills and experience in interacting with information and communication technologies.

2.2.2 Technologically savvy/digital wisdom

Schofield & Honore (2010) described Generation Ys as technologically savvy, hands on, interactive and collaborative. Research done by Hills, Ryan, Smith & Warren-Forward (2012, p. 156) indicated that 82% of generation Y students feel confident when using technology. They will use various devices to connect to the Internet or social media. Mobile technologies are used for information acquisition and sharing and mobile phones are used to control personal, social and academic life.

Tustin, Goetz & Heydenrych-Basson (2012, p. 9142) stated that Generation Y uses digital wisdom and is digitally competent. The authors define digital wisdom as an ability to find practical, creative and emotionally satisfying solutions to human problems. Digital competence is the skill in the use of digital technology. According to Coombes (2009, p. 30), recent research indicated that Generation Ys are not tech-savvy as portrayed but they are familiar with technology. However, the author says that if technically savvy means frequent

use, then Generation Ys are, since they are frequent users of technology. In addition to this, Schofield and Honore (2010) said that it is often assumed that Generation Ys are experts whereas some struggle with technology.

2.2.3 Connected 24/7

Many young people are growing up hyper-connected to each other and the mobile Web. They are 24/7 connected (constantly plugged in) and counting on the internet as their external brain (Anderson & Rainie, 2012). Zimmerman (2012, p. 177) stated that Generation Ys are always connected and constantly engaged in their different technology trends. According to Gibson (2013), 90% of Generation Ys check their emails, texts and social media using their smart phones first thing when they wake-up. This habit can be mistakenly identified as an addiction or they want to be connected 24/7.

2.2.4 Use of social media

Research has shown that Generation Ys are heavy users of social media and that they are constantly online. Facebook, YouTube, Blogs, Twitter and Myspace are mostly used for entertainment, education and chatting (Tustin, Goetz & Heydenrych-Basson, 2012, p. 9147). Due to social networking habits, students prefer to work in groups and regard their peers as an important resource. Social media is often used to verify data.

In research done in selected schools in Tshwane, findings revealed that learners used social networking sites such as Facebook, Myspace, Mxit, and YouTube. These sites were used to upload photos, post opinion, exchange general and private messages and obtain latest news on fashion or current news (Tustin, van Vuuren & Shai 2009, p. 56). Generation Ys use technology for social communication. Also findings of research carried out by Margaryen, Littlejohn & Vojt (2010, p. 443) indicated that the students used different tools for socializing, downloading music, social networking, blogging and gaming.

2.2.5 Quickly and effective communication

Millennials communicate quickly and effectively via email, social networks or text messaging (Anderson & Rainie, 2012). This trend is causing students to be impatient learners and to readily air their opinions and complaints even in an academic environment (Thaler, 2013, p. 270). The speed of new media has cultivated a lowered tolerance for delay on Generation Y (Williams & Rowlands, 2007). They are used to interacting with technology at all times, thus expecting people to respond the say way.

2.2.6 Ability to multitask

Generation Ys engage in different activities at the same time and are therefore known to be able to multitask (Prensky, 2001, p. 3). They use multiple digital devices simultaneously and in parallel, for example listening to an iPod while text messaging on the phone and browsing the Internet on the computer. Shih & Allen (2007, p. 91) said that Generation Ys often listen to a lecture while checking their emails and text messaging friends. Rowlands et al (2008, p. 299) found that since they were exposed to online media early in their lives, Generation Ys may have developed parallel skills or are adept at handling a number of simultaneous information streams together. Generation Ys believe that multitasking relieves boredom and they prefer to have several things going at once.

2.2.7 Preference for Peers

Generation Y finds peers more credible than librarians and lecturers. In a study on information seeking behaviour of undergraduate Biology students at the University College Dublin, it was found that none of the respondents ever went to the librarian for assistance. Sixty-seven percent of the respondents asked for help from friends or colleagues (Callinan, 2004, p. 93). Recommendations and suggestions by peers are important to Generation Ys and they enjoy learning from one another (Carpenter, 2012, p. 11 and Aplin, 2013, p. 3). According to Gibson (2013), millennials like to be loved and need constant feedback and gratitude. Generation Ys believe that they can learn outside the classroom when they are interacting with their peers (Skene, Cluett & Hogan, 2007).

2.2.8 Working in teams

Because of preference given to peers, Generation Ys prefer working in groups rather than individually. According to Gibson (2013) Generation Ys are team players. Collaboration with others is preferred. They combine teamwork with technology and digital literacy skills. According to Niles (2011, p. 48), Generation Ys are built-in collaborators. Evidence of collaboration is seen in a study on Generation Y and the changing function of the academic library done by Gardner and Eng. Findings indicated that the students wanted more collaborative workrooms in the library since the Information Commons was frequently completely booked (Gardner & Eng, 2005, p. 412).

2.2.9 Visually oriented

A Generation Y person prefers to receive information in graphical format. They use graphics rather than reading text. They grew up with a lot of visual stimuli. Duck & Koeske (2005, p.113) did research at the University of Pittsburgh on marketing Generation Y with 202 respondents. It was found that Generation Ys were visually oriented, easily get bored and had short attention spans. This was concurred by Sheesley (2002, p. 27) who found that Generation Ys easily run out of patience and easily get bored.

2.2.10. Critical thinking and cognitive development

According to Adams (2009, p. 13), Scott & O'Sullivan (2005, p.23) and Weiler (2004, p. 46) Generation Ys lack basic critical thinking skills when determining a website's objectivity and trustworthiness. Lack of critical thinking skills will influence their learning process and cognitive development. The reason might be the lack of reading or that they are merely using a surface approach instead of a deep approach to studying information (Heinström, 2005, p. 232).

According to Schofield & Honore (2010) and Weiler (2004, p. 51), Generation Ys are not concerned about accuracy of information or because they are assuming that most information is by nature accurate. In a previous study Coombes (2009, p. 37), gathered that the students used Wikipedia even though they knew that it

was not an authoritative academic resource. Results from research carried out by Zimmerman (2012, p. 178) indicated that Generation Ys may have learned the mechanical steps towards operation of technology but may have very few skills towards finding information they need.

2.2.11 Learning styles

According to Hills, Ryan, Smith & Warren-Forward (2012, p. 157) Generation Ys have different learning styles and expectations of education. They prefer multimedia educational methods that include online learning, audio/visual recorded lectures, using blogs, Wikis, e-books as resources and doing assignments using technology. Experimental and game-like learning at their own pace are preferred (Adams, 2009, p. 69). They are primarily visual learners (Weiler, 2004, p. 51).

They are described as holistic learners, oriented towards nonlinear and non-sequential learning (Schofield & Honore, 2010). The authors stated that Generation Y has high expectations particularly when it comes to learning. The authors further revealed that in a classroom session of Generation Ys, it is like a verbal blog because at times their feedback is quite brutally honest. Findings on research by Callinan (2004, p. 94) indicated that 60% of the participants stated that they preferred online classes since they were easy to use. According to Niles (2011, p. 48), their learning preference is experiential activities, technology and teamwork. They learn by doing, therefore they want to learn through exploration rather than being passive recipients of information.

2.2.12 General

As Generation Ys become bored easily, they need flexibility and mobility. They are self-confident, independent, optimistic and hopeful. As they are determined, ambitious, entrepreneurial, goal driven and success driven (an achieving generation with strong goals and aspirations), they need exciting work (Gibson, 2013). They thirst for instant gratification, settle for quick choices, and lack patience. These trends are leading to a future in which most people are shallow consumers of information (Anderson & Rainie, 2012).

Millennials are confident, team oriented, computer literate, and self-assured (Tenofsky, 2007, p. 285). In another study, Skene, Cluett & Hogan (2007) stated that there were positive and less positive characteristics of Generation Y. The positive include optimism, familiarity with technology, multitasking and high expectations. The less positive characteristics were preference for input from peers rather than academic staff, reliance on the web for information and decision making without thought of consequences.

2.3 Generation Y or Digital Natives in the South African Context

Various studies on South African Generation Ys have been undertaken. In this section only two studies will be discussed. More information on Generation Ys in the South African contexts is discussed in the remainder of the sections of this chapter.

2.3.1 Czerniewicz and Browns' study

According to Prensky (2001, p. 1), Generation Ys have spent the entire lives surrounded by toys and tools of the digital age such as computers, cell phones, digital music players, videogames and the Internet. The author goes on to say that students today are all “native speakers” of the digital language of computers and the Internet.

Research on students who were born in the digital age in the South of Africa was conducted by Czerniewicz & Brown (2010, p. 358). The study comprised three phases and was based on an ongoing six year research project. Phase one involved 6577 students across 4 universities in the Western Cape Province of South Africa. Phase two surveyed 3533 students from 6 different universities in other provinces of South Africa. Phase three involved 513 students identified from the previous phases across four universities.

In the study, Czerniewicz & Brown stated that digital natives were being marginalized in South Africa. It was found that age only in the South African

context was not a determining factor. Findings demonstrated that within South African higher education, students born into the millennial generation cannot be assumed to have grown up digital. It was determined that only 26% of the students can be described as having grown up digital, therefore a small percentage of students met the criteria of digital natives as defined by Prensky (2001, p. 1). It was found that the 157 students who exhibited “digital native” characters were older than the prescribed 13 to 34 years old.

According to Czerniewicz & Brown (2010, p. 363), the students who did not exhibit the digital natives characteristics were called “digital strangers”. Digital strangers were believed not to have integrated with technology since birth. They had only been exposed to ICTs at universities. When these students arrived at university, they lacked experience because they were not exposed to opportunities to use computers. Due to different back grounds, these students did not have easy access to technology or had limited exposure. It was found that 52% of the students had no access to computers off campus and 58% never or hardly used emails. These findings correlate with King’s assessment of the competencies of incoming Arts students at UWC (King, 2007, p. 154).

Czerniewicz and Brown indicated that although students recognised the importance of computers, they used cell phones to access the Internet because they cannot afford to buy their personal computers. The study showed that students used social networks like MXit as a means of communicating since it was cheaper than sending text messages.

As part of the study, Czerniewicz and Brown selected two students who represented two extremes of digital literacy. One of the students had experience in the use of computers at the age of seven and the other student had not had access to ICTs while growing up. Interviews were conducted on both students to determine the students’ access to and the use of ICTs. It was found that both students were finding it difficult to live without their cell phones and the Internet. The study found that the student who had been exposed to computers at the age of seven was comfortable with what he knew in terms of technology. He was not

motivated to learn more but accumulated more digital literacy skills when opportunities arose. The other student categorized as a digital stranger, showed characteristics of a digital native and developed a positive attitude towards ICTs. When exposed to digital tools and opportunities at the university, he became a digital native.

Similar observations were highlighted by Helsper & Enyon (2010, p. 505). They emphasised that experience was also an important variable in relation to digital nativeness. The authors state that the more a person uses technology or the Internet, the higher the level of self-efficiency and excellent skills. For some authors, it appears that age was not an essential bench mark when it comes to digital natives. However, the amount of exposure, experience or expertise with the new technologies is important. According to Helsper & Enyon (2010, p. 508) there was no straight forward answer to determine digital nativeness; age, experience and breadth of use, seemed important.

2.3.2 Thinyane's Study

In 2009, Thinyane conducted research on the use and experience with technology by South African first year students. The study was done at Rhodes University and the University of Fort Hare in the Eastern Cape. Questionnaires were distributed among 270 students. According to Thinyane (2010, p. 409) most of the students who participated in the study were born between 1989 and 1991 and therefore aged between 18 and 20 at the time of the study. It was indicated that 88.9% of the students had mobile phones with cameras; 49.6% had laptops or notebooks; 46.3% had Broadband Internet access and 43.3% had wireless Internet access.

It was found that 62.8% of the students used computers to play digital music and 38.7% played games on a daily basis. The study indicated that 71% used the web for emails; 70.6% accessed eLearning sites; 62% used the web for social networking; 55% browsed for general information and 51.7% looked up information for study purposes (Thinyane, 2010: 411). Other web based activities were downloading podcasts, blogging, buying and selling things, building and

maintaining website, publishing podcasts, playing networked games and contributing to a wiki.

2.4 Generation Y and the use of Social media

Social media has been commonly used by Generation Y to connect, communicate and interact with each other using a variety of web-based platforms. This can be any online service through which an individual can create and share a variety of content. A study was conducted at the University of New Hampshire to determine the social media usage among 1127 students. Different social media used included Facebook, YouTube, Blogs, Twitter, Myspace and LinkedIn (Martin, 2010). Facebook was identified by 96% students as the most popular media platform used daily. Also found was that 84% of the students used YouTube, 20% used blogs, 14% used Twitter, 12% used Myspace and 10% used LinkedIn daily. When the students were asked the reasons for the use of social media, the majority of the students (89%) indicated for social reasons. Seventy-nine percent of the students used it for entertainment, 26% used it for education and 16% used it for professional reasons (Martin, 2010).

Research was conducted by Tustin, Goetz & Heydenych-Basson (2012, p. 9140) among 1050 young people between the ages of 12 to 21 across the Gauteng province in South Africa. The research investigated the Internet diffusion, digital divide and inequality as well as digital skills or competencies among digital natives in Gauteng. The findings revealed that one in four youngsters qualified to be true digital natives (Tustin, Goetz & Heydenych-Basson, 2012, p. 9144).

The findings of the study further exhibited that over half of the learners accessed the Internet via cell phones and that approximately 70% of households with adolescents have Internet access. The respondents used the Internet for searching for information downloading content such as music or wallpaper (55.4%), accessing Facebook (37.9%), for playing online games (34.3%), for school assignments (33.8%) and for chatting (30.5%) (Tustin, Goetz & Heydenych-Basson, 2012, p. 9147). Social media activities indicated to be used by the

students in the study were Myspace, publishing on blogs, receiving and sending emails and dating.

2.5 Information Needs

A study conducted by Agosto & Hughes-Hassell (2005) investigated information behaviour of Generation Ys using the ELIS model as theoretical framework. Information needs identified included school work, social life, leisure activities, weather, clothing, current events, personal improvements, learning institutions, and jobs.

Shenton & Dixon (2004, p. 179) carried out a study on 188 students at the town of Whitley Bay on the North East Coast of England. Data was collected using 12 focus groups and 121 individual interviews to determine if the information needs of the students correlated with the ELIS model. Findings of the study indicate that Generation Y students need advice, skills development, spontaneous information based on life, emerging problems and curiosities, empathetic understanding of others, school related information, personal information, interest driven information, re-interpretation of information already known to participants and information to confirm or deny existing beliefs.

In a comparative analysis of the web information seeking behaviour of students and staff at the University of Zululand (UniZul) and Durban University of Technology (DUT) by Nkomo (2009), participants were asked what made them search for information. Twenty-seven percent of UniZul and 36% of DUT respondent's information needs were driven by their studies.

A report by Gross (2009, p. 5730) on research carried out using the ELIS model to determine information needs of Generation Y at the Florida State University, indicated that Generation Y students had content and affective needs. These included advice, life situation information, information on support for skills development, school related subjective information, self-development information and personal information.

2.6 Information Sources

The study by Markwei (2013) was based on academic and non-academic information needs of Generation Y to establish a holistic understanding of their information seeking behaviour. It was found that information sources consulted were people as well as sources in printed and electronic format. People consulted included family members, friends and mentors. Other sources used included television, the Internet, radio, newspapers, personal communication systems (instant messaging (IM) and emails), printed academic work and magazines.

Research was conducted by Gardner & Eng (2005, p. 409) at the University of Southern California on the changing functions of the academic library. Information was gathered from 1267 undergraduate Generation Y students. The study concluded that Generation Y students were increasingly relying on the Internet and other technology tools for almost all their information needs. Their findings showed that 80.6% of the respondents used the library as a hall, 61.3% were there to gain access to the library computers for school work and 51% used the library to gain access to the library computers for school work and personal needs respectively. Findings indicated that although it was not the preference of the majority of students, printed sources were still used. Nineteen percent of the respondents used the library for checking out books and 12% used printed journals or magazines.

The study by Callinan (2004, p. 95) at the University College Dublin, focused on the information sources used by students for course-work and to what extent they accessed databases and electronic resources. The findings indicated that since the Internet is easy and quick and supplied access to useful resources, first year students used websites more than library books.

Fisher & Julien (2009, p. 326) reported that Generation Ys preferred to use friends and family as information sources. Librarians were not viewed favourably by participants and will not be used as formal information sources. In a report by Connaway & Dickey (2010) on a study of college students' perceptions of

information sources, it was found that because search engines were believed to be fast and convenient, it was the first choice of the majority of students. Thirty-three of the respondents indicated that because they were using the Internet, they visited the library less frequently and only to do homework or study there.

2.7 Information Seeking Behaviour

A study by Reigh & Hilligos (2008, p. 63) found that while seeking for information, students may interact with people, printed resources and digital media. Most students started their information seeking by asking advice on where they must start seeking from professors, coaches, parents and/or friends.

The study also found that students had a few favourite websites which they used for their everyday life information seeking. Information retrieved from these sites included news, technology, cooking, movies, fashion and sports. For academic work, participants preferred to start their seeking by doing a Google search. The reasons for starting with a Google search were because they believed Google to be legitimate, of excellent quality, most comfortable to use as compared to other search engines, more credible and “the place to be”. On credibility of sources, it was found that the students believed that information was more credible and trustworthy when two different sources agreed on something that was of interest to them (Reigh & Hilligoss, 2008, p. 63). According to Rowlands et al (2008, p. 292-293), Generation Ys are stereotyped because numerous research has indicated that they use search engines more than library books or databases.

In a study by Saunders (2011) on Generation Y students from campuses in Johannesburg, Cape Town and Durban, it was found that from the 144 participants, 99% of the students used the Internet daily for their information seeking. Although 90% had Internet access at home, 73% accessed the Internet via their mobile phones. As part of the students’ information seeking, 91% listened to the radio (Y-fm) while 73% read magazines for fashion, gossip, sports and men’s health. Sixty-four percent of the participants watched television, 60% watched videos on YouTube and 64% read books. As part of information seeking,

98% of the students preferred communicating through Facebook and instant messaging over electronic mails (e-mails).

When seeking for information different search techniques may be used. Research by Korobile, Malliari & Zapounidou (2011, p. 158) examined the information seeking strategies of graduate students of the Aristotle University of Thessaloniki in Greece. It was found that when engaging with electronic resources, Boolean operation, truncation and proximity operators were seldom used to retrieve relevant information.

The students were asked how often they modified their search strategy if the initial statement did not retrieve satisfactory results. The results showed that 20.1% claimed they had never and 22.2% rarely modified their search strategy. Students who made modifications have done so often (15.9%), quite often (16.4%) and very often (25.5%). Students changed keywords and re-did the search only when the search was not successful. On evaluating the relevance of retrieved records when using search engines, 43% found relevant results very often compared to 23% of the respondents who found relevant results very often when searching e-journals and databases.

In an information seeking behaviour study done by Connaway & Dickey (2010) at the British Library Learning in London, students were asked how they went about finding information. It was found that undergraduate students turned more to web diaries and blogs for relevant information. The respondents also stated that the library OPAC was difficult to use and should be more like search engines to ensure easiness to use and 'guaranteed' results. Respondents do not expect to spend much time locating items and spend little time to evaluate search results. Library resources were not regarded as intuitive.

2.8 Information Grounds

In a study on 'information grounds' at the University of Washington in 2004, data was gathered from 729 students. The approximate age of the students was 24

years (Fisher, Landry & Naumer, 2006, p. 291). The study identified that the most common information ground of the students was the campus, including areas such as classrooms, hallways, study centres, student lounges, rehearsal areas, and the Red square (large outdoor gathering area for students). Other information grounds indicated by the students in the study were coffee shops, restaurants and group social gathering places. When asked to identify information grounds where the best information was encountered, roughly 42% of the students indicated restaurants and coffee shops and 14% the campus. Sixty-three % of the students indicated that they invariably turned to online sources and 26.5% preferred seeking information from strong interpersonal ties. The study found that 53.1% of the participants indicated that they went to the information grounds on a daily basis.

When participants were asked the kinds of topics encountered at the information grounds, indicated was information based on self-improvement events happening in the area and in the world, people, opinion and new technologies. In the study the students indicated that 50% -75% of the information about events, opinions and people encountered were by accident or chance.

Research carried out by Counts & Fisher (2008), indicated that social networking services were used as information grounds. Social networking raises social awareness through exposure to the day to day activities and social interaction of the members of that social network. Findings of the study indicated that the participants used social networks to coordinate get-togethers, chat and information exchange (Counts & Fisher 2008, p. 156).

Gathered from the study was that participants engaged in the online information grounds (social networks) while in the different physical space information grounds. Count & Fisher (2008, p. 162) stated that there was a relationship between online and offline or physical information grounds, which is information sharing by members.

2.9 Conclusion

Several issues have been discussed in the literature with interesting controversies being highlighted. Particularly, literature has shown that there were geographic differences regarding Generation Y based in the USA and Africa. Issues like varying characteristics, information needs, information sources, information seeking behaviour and information grounds have been pointed out.

The literature has indicated that Generation Ys are young people who developed differently since they have grown up in a world surrounded by new technology. With this generation, technology and the Internet has become part of their everyday lives. Age, experience and exposure to technology were the most important factors considered in determining if individuals were really digital natives. In South Africa, age only cannot be a deciding factor, Generation Ys are high users of social media.

Information needs of Generation Y students are based on their academic and social life. To satisfy those needs, students may use different sources. It may include people and printed or non-printed sources. It has been stated that most of the time Generation Y was in favour of different search engines for their everyday life information seeking. Information grounds for students at universities were mostly coffee shops, restaurants and group social gatherings. Literature based on the two models (ELIS model and Pettigrew's Information Grounds theory), point out that there was no systematic manner of information seeking. Usually students seek information consciously and unconsciously in formal or informal information grounds. What was revealed was that there was no stipulated way of information seeking, information is gained anywhere at any time.

The next chapter will describe the general research approach, research design, data collection and analysis strategies that were used in this research.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This chapter provides an overview of the research design and data gathering methods that were employed to respond to the research problem and questions. The research problem and questions were discussed in chapter one. The intention of the study was to find out if Generation Y UWC students during information seeking conform to what is defined by the ELIS and Information grounds theories. Both theories state that information is mostly gained unconsciously or consciously in formal and informal places.

For the study, data was collected in two phases. The researcher had to first identify students who showed characteristics of Generation Y as stated by Prensky (2001, p. 1) and take into consideration findings based on research conducted by Czerniewicz & Brown (2010) on “digital natives” in the South African context. The identified Generation Y students were then interviewed to create an in-depth picture of their information behaviour and the motive behind the use of technology in their everyday lives.

3.2 Research Design

The study is both a quantitative and qualitative case study. According to Bell (1993, p. 8), the great strength of a case study method is that “it allows the researcher to concentrate on a specific instance or situation and to identify, or attempt to identify the various interactive processes at work”. There are three types of case studies identified by de Vos, Strydom, Founche & Delpont (2005, p. 273). They are an intrinsic, instrumental and collective case study. The relevant case study for this project was the instrumental case study, since it is used to gain better understanding or knowledge about a social issue (de Vos et al. 2005, p.

273). Connaway & Powell (2004: 80) defined a case study as a type of qualitative research in which in depth data is gathered relative to a single individual, program or event for a purpose of learning more about an unknown or poorly understood situation. In this particular case, the researcher was seeking to learn more about and understand the information behaviour of Generation Y students at UWC.

Mixed Methods Research

This research was based on the mixed methods approach. The mixed methods approach is combining qualitative and quantitative methods in a single study. According to de Vos et al. (2005, p. 357), mixed methods research is a combined-method study whereby a researcher uses multiple methods of data collection and analysis. Therefore, with mixed methods approach the researcher combined elements of qualitative and quantitative approaches for the purpose of breadth and depth in order to better understand a research problem. According to Creswell (2009, p. 205), mixed methods research broadens the understanding by incorporating both qualitative and quantitative research. The research design is reflected in Figure 3 below:

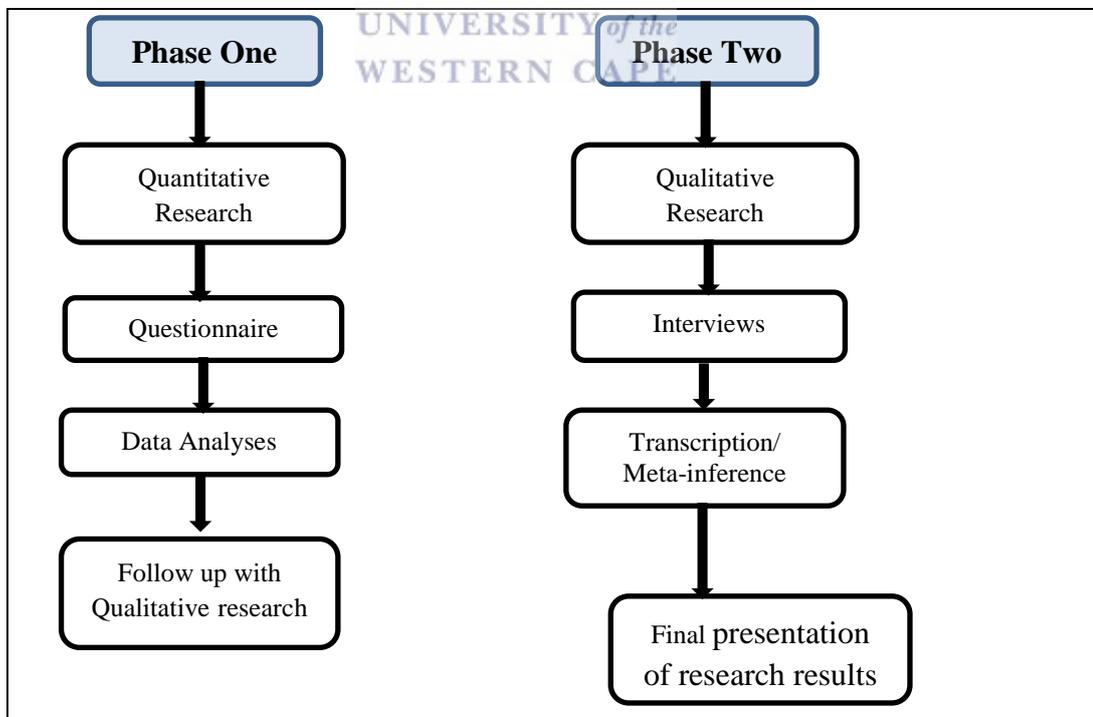


Figure 3: Research design graph (sequential design)

The reason behind the use of mixed method for this study was that, since the research was done at a South African university, the researcher had to first identify Generation Y students. Literature has shown that in the South African context birth year cannot be a deciding factor but experience with a variety of technology tools should also be considered. This is based on the historical background of the Republic of South Africa's economy and political affairs. As such the researcher could not assume that all students at UWC campus were Generation Ys. The study used mixed methods in the sense that the first phase of data collection was administered by using a quantitative method (questionnaires). During the second phase, data was gathered by the use of a qualitative method (interviews). Data analysis was conducted using statistical and content analysis respectively.

The mixed methods approach attempted to answer research questions using multiple approaches rather than constraining or limiting the research. With this method, data was represented in both numerical and textual format. The mixed methods approach employs strategies of inquiry that involve collecting data either simultaneously or sequentially to best understand the research problem. According to Creswell (2009, p. 234), sequential procedure is when the researcher seeks to elaborate on or expand the findings of one method with another method.

Sequential procedure or strategy involves the first phase of quantitative data collection and analysis followed by the second phase of qualitative data collection and analysis as illustrated in Figure 3. For this study, the researcher employed a quantitative method with the use of questionnaires. The questionnaire assisted in identifying Generation Y students at UWC. The qualitative method was then used which involved detailed explorations with few individuals using interviews. The main weakness of this sequential procedure is the length of time involved in data collection, since there are two separate phases (Creswell, 2009, p. 211). Data collection and analysis were done separately during each phase.

Quantitative Research

The research was a qualitative case study but part of it encompassed quantitative research methods. Creswell (2009, p. 4) defines quantitative research as “means for testing objective theories by examining relationship among variables”. The author indicates that a quantitative approach is based on post-positivist knowledge claims. It tests or verifies theories or explanations, uses unbiased approaches and measures information numerically (Creswell, 2009, p. 17). A quantitative approach employs statistical procedures, which include statistical analysis and statistical interpretation. According to Conrad & Serlin (2011, p. 149), quantitative research methods are typically interested in prediction. Quantitative survey designs require questionnaires as a data collection method (de Vos et al., 2005, p. 137). Thus, with quantitative a approach, the researcher primarily uses post-positivist claims for developing knowledge and data is collected with an instrument that yields statistical data.

Qualitative Research

Qualitative research is a “means for exploring and understanding the meaning individuals ascribe to a social or human problem” (Creswell, 2009, p. 4). Qualitative research tends to give more attention to the subjective aspects of human experience and behaviour (Connaway & Powell, 2004, p. 76). Qualitative studies are often used in issues such as contradictory behaviour, beliefs, emotions, social norms or characteristics of the population under study (O’Leary, 2004, p. 104). Qualitative research focuses not on quantities or numerical data but on the significance that derives from the data.

Data collection methods used for qualitative research are mostly in-depth interviews and focus groups. According to Rasmussen, Ostergaard & Beckmann (2006, p. 1782), these data collection methods make it possible to capture both cognitive and the emotional aspects from the respondents. Research with qualitative methods is able to go into depth with the issue and delve into the individual respondent’s perception and understanding. The reason why in-depth interviews were chosen for this study was because they enabled the researcher to

understand the issue under study better and to delve into the individual respondent's perception and understanding. Thus, this differentiates qualitative research from quantitative research.

3.4 Population and sampling

Population

The population for this study was UWC students. The sample was UWC students who answered questionnaires and participated in interviews. The research site for the study was the University of the Western Cape campus. UWC encompasses students from different backgrounds and races. The university has a growing number of African students with severe constraints because most are coming from disadvantaged communities (UWC Website, 2014). According to Czerniewicz & Brown (2013, p. 48) a large group of students in South African universities come from disadvantaged backgrounds. Some of the areas where the students originated from are environments which lacked infrastructure such as electricity.

A study population is “the aggregation of elements from which the sample is actually selected” (Babbie, 2011, p. 214). Thus, population is a total of all the persons who have certain characteristics which meet certain criteria or are of interest to the researcher. In this study, the population was students at UWC who possessed characteristics of Generation Ys. From the population the researcher was able to choose a subset for representativeness, which is known as a sample.

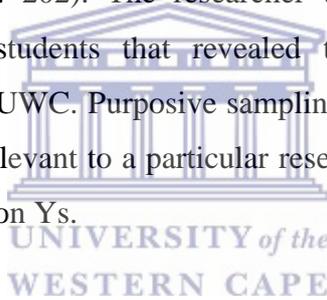
Sampling

Balnaves & Caputi (2001, p. 90), define sampling as “a procedure for selecting a subset of units of analysis from a population”. This is a practise of choosing a small portion of the total set of objects or people which comprise the subject of the study. The first phase of the study with a quantitative approach employed simple random sampling. Simple random sampling is when each element in the sampling frame has an equal chance of being chosen (Balnave & Caputi, 2001, p.

91). According to these authors the benefit of simple random sampling in the generalizability of findings.

Creswell (2009, p. 233) describes random sampling as a procedure in quantitative research for selecting participants. Each individual has an equal probability of being selected ensuring that the sample will be representative of the population. For this study, the researcher randomly distributed the questionnaires among fifty-four students around UWC campus at places such as the student centre (hall), coffee shops, residences, in front of and inside the library building, computer laboratories and in the gardens.

The second phase of the study used purposive sampling. Purposive sampling is based on the judgement of the researcher, in that a sample is composed of elements that contain the most characteristics and representative of the population (da Vos et al. 2005, p. 202). The researcher used purposive sampling after selecting elements or students that revealed the most characteristics of a Generation Y student at UWC. Purposive sampling groups participants according to pre-selected criteria relevant to a particular research question. In this particular study it was the Generation Ys.



Sample size

Generation Y students were pre-selected in the first phase of the study using a quantitative data collection method (questionnaires) based on the research questions. The questionnaire was distributed among fifty-four students. The researcher selected seven students to be interviewed after analysing the questionnaires from the first phase.

3.5 Research methodology

The study was conducted in two phases. The first phase aimed at identifying students that met the criteria of Generation Y, in particular if the University of the Western Cape has students who are digital natives. As stated in the previous chapter, the literature revealed that a Generation Y from South Africa might be

different from one in other first world countries. Although the characteristics of Generation Y in the various countries might be similar, the birth year might be different in the South African context. A variety of aspects such as age, experience with ICTs and the different characteristics of Generation Ys had to be taken into consideration. The second phase of the study aimed at gaining understanding on information seeking behaviour and information grounds of Generation Y students at UWC. The methodology employed to conduct the two phases of the study is discussed below.

3.5.1 Phase 1

Questionnaire Design

In order to identify Generation Y students at UWC before advancing to the second phase of analysing their information behaviour, the researcher used self-administrating questionnaires. A questionnaire is a widely used instrument for collecting data in research. De Vos et al. (2005: 166) define a questionnaire as “a set of questions on a form which is completed by the respondent in respect of a research project”. They are used in quantitative studies. Questionnaires are easy to administer and they allow the researcher to survey a population with little or no personal interaction. This instrument permitted the researcher to quickly choose from a large number of students who had the most relevant elements for this study.

Data collection Instrument: Questionnaire

The questionnaire had sixteen questions (See Appendix B). The questions were designed in such a way that they identified generation Y characteristics and enabled the researcher to select students who displayed the most characteristics of a digital native.

- Question 1 of the questionnaire was to determine the age of the participants.
- Question 2 and 3 gathered data pertaining to the exposure and experience of the participants in the use of the Internet, information and communication technology tools.

- Question 4 was meant to find out the electronic devices or ICT tools the students owned. Questions 5, 6, 7, 8 and 9 were meant to ascertain if students had access to computer facility and the Internet off campus.
- Question 10 aimed to gather data on the frequency of usage of ICTs and the Internet by Generation Ys.
- Question 11, 12 and 13 was to determine if the students used social media as well as the mode of communication they preferred.
- Question 14 was based on how the participants had learnt to use computers.
- The last two questions 15 and 16 were meant to find out if the participants engaged in different activities simultaneously, in other words, able to multitask.

Self-Administered Questionnaire

A self-administered questionnaire is a set of questions on a form that are distributed to people in order to collect necessary data for that particular survey (Balnaves and Caputi, 2001, p. 84). They can be supervised distributed, but are also designed specifically to be completed by respondents without the intervention of the researcher. This means that the researcher is present when the respondent fills in the questionnaire but does not encumber them. Basically, these are questions submitted in writing to obtain useful data for a particular research disseminated by the researcher.

Administration of questionnaires involves a variety of aspects. According to Balnaves & Caputi (2001, p. 84), administration of questionnaire involves layout, length, types of questions, response rates and ethical issues. The most common ways used to distribute these questionnaires is through mail, fax, electronic mail, newspapers, the Internet or face to face. The researcher opted to disseminate the questionnaires to respondents personally.

Although by using self-administered questionnaires the researcher remains in the background (de Vos et al., 2005, p. 168), the advantage of being present in the distribution of the questionnaire is to encourage respondents to ask questions if necessary while completing the questionnaire. Another advantage of using this type of questionnaire is that the response rate is high as the researcher can collect

completed questionnaires. Thus unreturned questionnaires from respondents are prevented.

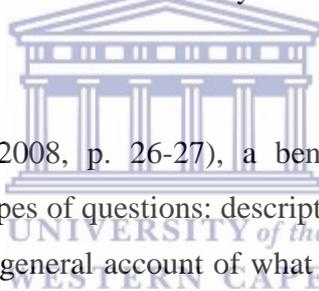
3.5.2 Phase 2

Interviews

The students who completed the questionnaires used in the first phase, were requested to provide their students numbers. The student numbers were used by the researcher to send emails to students requesting them to participate in the interviews which formed the second phase of the study. Conducting interviews is the most predominant method of collecting data in qualitative research. Bell (1993, p. 91), described an interview as a conversation between a researcher and a respondent with the purpose of eliciting certain information from the participants. It is one on one dialogue between a researcher and the participant. In an interview, the main task is to understand what interviewees are saying and experiencing. According to de Vos et al. (2005: 287), interviews attempt to understand the world from the participant's point of view and unfold the meaning experiences. Thus the whole purpose of an interview is to explore the views, experience, beliefs and/or motivations of individuals on that specific matter investigated.

The questions for the interviews were derived from the ELIS and Pettigrew's information grounds theories engaged as theoretical framework for the study. With both models, the emphasis is that information behaviour takes place in both working and non-working settings. Pettigrew's information grounds model states that people go to formal and informal places where information is shared. Information thus flows in many directions. According to Savolainen (2009, p. 1781), information seeking occurs in work related and leisure related contexts of an individual's everyday life. In this study work can be correlated to the students' academic work. Therefore the theories are about how people solve their information needs or problems and how they perceive information and the criteria used to accept and reject information every day.

The study used semi-structured interviews. Willing (2008, p. 24) stated that semi-structured interviews require careful preparation and planning, who to interview, how to recruit participants, what to ask participants, how to record and transcribe the interviews. According to Harrell & Bradley (2009, p. 24) semi-structured interviews are used to gather opinions, perceptions, attitudes, facts and background information. With semi-structured interviews, the researcher has a list of questions or fairly specific topics to be covered. This list is referred to as an interview guide or schedule or agenda (Willing: 2008, p. 25). Although the interview schedule ensures that the interview does not lose sight of the research questions, it does not force the interviewer to follow the questions exactly. Questions not included in the guide may be asked. The researcher can probe or ask follow-up questions to pursue in-depth information around the topic. According to Gill, Stewart, Treasure & Chadwick (2003, p. 292), respondents can answer questions in as much details as they want and the interviewer can adjust questions.



According to Willing (2008, p. 26-27), a beneficial interview guide should embrace four different types of questions: descriptive questions, which prompt the interviewee to provide a general account of what happens; structural questions to identify the categories of frameworks of meaning; contrast questions which allow the interviewee to make comparisons between events and experience and evaluation questions which are about the interviewee's feelings towards something.

Limitations of a semi-structured interview are that it can take long to conduct, because each interview is unique, is difficult to directly compose the results and data collection and analysis are time consuming (Gill et al, 2003. p. 292). The advantages of using interviews are that questions can be asked spontaneously, that questions can flow naturally based on information provided by respondent and that the interviewer is able to capture body and facial gestures (pause, laughter, silence) of the respondent (Gill et al, 2003. p. 222).

For this study the researcher aimed to acquire rich detailed answers using semi-structured interviews. A schedule providing a set of predetermined open ended questions that had a logical sequence covering the research topic thoroughly (See Appendix C) was designed. The open-ended questions allowed participants to express themselves at the same time guiding the researcher in extracting the specific information required for the study. As stated before, the questions on the interview schedule were based on the two theories and the broad research questions used for the study (See Table 1 below). To ensure that no information was lost, the interviews were recorded. The researcher obtained permission from the participants to use a voice recorder. The researcher also had a colleague who assisted with the interviews in terms of capturing body languages, facial expressions or any non-verbal communication used by participants.

TABLE 1	
Research Questions	Interview Schedule Questions
What are the everyday and academic information needs of Generation Y students at UWC?	Question 1 and 2 required information on everyday information needs of the students
How do Generation Ys at UWC locate information for their everyday information needs as well as for their academic?	Question 4 to 8 and question 10 to 11 looked at the information seeking of the student and their preferred sources.
How does the use of technology affect Generation Y's information seeking behaviour?	Question 16 to 19 considered information in regard to the impact of the use of technology during information seeking. This is based on the fact that these students are known to be digital natives.
How do Generation Y students at UWC evaluate retrieved information?	Question 13 required information on how they verify the reliability of information gained during information seeking.
What are Generation Y student's information grounds?	Questions 3, 4, 5, 6, 8 and 9 required the different places or environments the students go to, it might be intentionally for

	seeking information or unintentionally.
What are the barriers faced by Generation Ys in their information seeking?	Question 14 and 15 was intended to identify barriers that the students encounter in the processes of information seeking.

Table 1: Research Questions and Interview schedule questions

3.6 Pilot Study

Pilot studies are designed to determine whether the intervention will work. According to de Vos et al. (2005, p. 402), pilot tests are implemented in settings convenient to the researcher and will help the researcher to identify elements that may be needed to be revised. A pilot study is a preliminary test of questionnaire or interview schedule that helps to identify problems and benefits associated with the design (Balnaves & Caputi, 2001, p. 87).

De Vos et al. (2005, p. 206) define a pilot study as “a small study conducted prior to a larger piece of research to determine whether the methodology, sampling, instruments and analysis are adequate and appropriate”. The authors also defined a pilot study as the “dress rehearsal” for the main investigation. The reason for the researcher to conduct a pilot study was to be sure if the instrument to be used will be able to gain the required information for the study. This is because no matter how careful a researcher is when designing a data collection instrument, there will always be possible errors. As such a pilot study assisted the researcher to correct errors, change confusing questions, prune some questions or refine the wording.

For this study, a pilot study was conducted prior to the actual research. The researcher selected a small number of respondents who had characteristics similar to those of the target group of respondent. This pilot study was conducted among fourteen third year students at the Department of Library and Information Science. The researcher distributed questionnaires to 14 students and briefly explained what the study was all about. The students were requested to point out questions that were difficult to understand and where they needed clarity. The researcher

used Excel to analyse data from the pilot study. The researcher also tested the interview guide on two of her colleagues.

3.7 Analysis of data

As data was gathered using two different instruments, questionnaires and interviews, different methods for analysing data were employed. Discussed in detail below are how data from the questionnaires and interviews were analysed.

Analyses of Questionnaire

The questionnaire consisted of sixteen closed and open-ended questions. Most of the questions were closed-ended in nature, where participants had to select relevant answers from the provided list. The Statistical Package for Social Science (SPSS) programme was used to analyse data from the questionnaires. According to Greasley (2008, p. 2) “SPSS is a window based programme that can be used to perform data entry and analysis and create tables and graphs”. This programme enabled the researcher to record data from the questionnaire survey, manipulated them in various ways and produced a wide range of statistical analyses and reports. The researcher used SPSS and Microsoft (MS) Excel to develop graphs, charts and tables to illustrate findings or summarize gathered data.

Transcribing Interview responses

The researcher recorded all interviews with permission from participants, thus the researcher needed to transcribe data. Transcription involves close observation of data through repeated careful listening. According to Davidson (2009, p. 37), transcription is a transformation of sound from recordings to text. A process that is theoretical, selective, interpretive and representational. Interviews are accompanied with non-verbal communication such as hands, face and body gestures. It was essential for the researcher to transcribe verbal and non-verbal communication.

According to Beiley (2008, p. 128) transcription of interviews needs to capture features such as the tone of voices, emphasis, pauses and the body language. When transcribing interviews, it was important for the researcher not to correct interviewees' words or change contents. Davidson (2009, p. 37) also stated that transcribing interviews can be difficult and requires listening skills, patience and careful editing. The researcher converted the recordings of the interviews into text in order to identify themes.

Thematic Analysis

Thematic analysis is a qualitative analytic method for identifying, organizing, analysing and offering insight patterns or themes within data (Brown & Clark, 2006, p. 80). Themes are there to capture something important about the data in relation to the research question and interpret various aspects of the research topic. It assists in identifying meanings and experiences found. As such the themes are driven by the data. After transcribing the interviews, the researcher had to group the responses, identify themes and organise the themes into a structure that illuminates the material. The researcher used a mind map to organise the themes. A mind map is used to visually organise information in a form of a diagram. Brown & Clark (2006, p. 80), identified six phases that can be used in thematic analyses which are:

- Familiarizing with data
- Generating initial codes according to something relevant to research questions
- Search for themes
- Reviewing themes
- Defining and naming themes
- Producing the report

The researcher followed these six phases and identified relevant themes that are presented in the next chapter.

3.8 Conclusion

The chapter has described the research design and methodology of the study. The study was a combined quantitative and qualitative case study. A mixed method approach was used to gather data. Data gathering took place in two phases. Population of the study was registered students of UWC. The first phase employed the quantitative method of questionnaires to identify Generation Y students at UWC. Simple random sampling was used to ensure that the respondents represented the population. SPSS was used to analyse data gathered from the questionnaires. The second phase employed the qualitative method of interviews. An interview schedule was used as a guide for the interviews. Purposive sampling was used to determine interviewees. Thematic analyses were used to analyse data gathered from the interviews. Analyses of data gathered and summary will be presented in the following chapters.



CHAPTER 4

RESEARCH FINDINGS: Questionnaires

4.1 Introduction

This chapter presents and discusses findings of the questionnaires in an attempt to understand the information behaviour of Generation Y students at UWC. As described in Chapter 3, there were two phases. The first phase of the project consisted of administration of questionnaires to assist in identifying Generation Y students at UWC. Narrative plain text, tables and graphs are used to present the collected data.

4.2 Generation Y: age

As it was identified by Goneos-Malka (2011, p. 173) that generation Ys are born between the years 1980 to 2001 and should therefore during the period of this research fall between the ages of 13 and 34, question 1 required respondents to record their age. Figure 4 below reflects that the age of 79.6% of respondents were between 18 to 22 years. Students aged between 23 and 26 years, 27 and 30 years and 31 to 34 years represented 7.4%, 5.6% and 7.4% of the participants respectively.

The results disclosed that the majority (79.6%) of the 54 participants were aged between 18 and 22. This meant that they complied with the age requirements of Generation Y individuals. As stated in the literature review in chapter 2, the birth date of Generation Y is not the only criteria as there are vast differences in some particular countries.

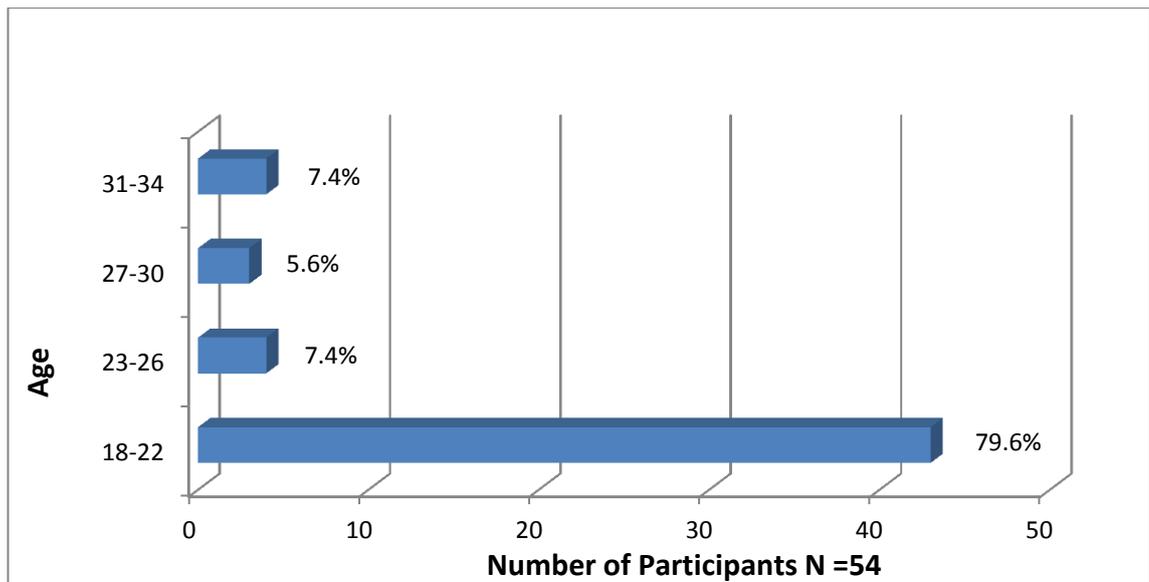


Figure 4: Age of Participants

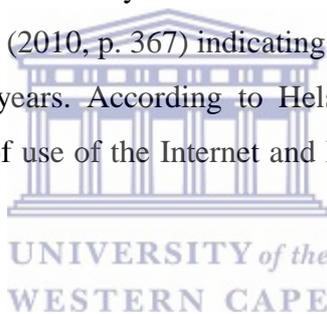
4.3 Exposure to the use of information and communication technology (ICTs) and Internet

In South Africa, not all Generation Ys were exposed to ICTs since birth but their experience in the use of ICTs and the opportunities they had could be used in identifying them. Question 2 and 3 were asked to establish the number of years respondents had been exposed to and had been using the Internet and ICTs. This was based on the fact that due to the political background of the country, age is not the only determining factor to characterize Generation Ys in South Africa. As it could not be assumed that South Africans aged between 13 and 34 years had been exposed since birth to and had experience in the use of ICTs, students were asked to indicate the age they were exposed to the Internet and ICTs. Results in Table 2 below show that 11 (20.4%) participants were exposed to ICTs and the Internet between the ages of six and ten years, 23 (42.6%) were exposed between 11 and 15 years old, and 18 (33.3%) were exposed from the age of 16 and above. Two (3.7%) respondents did not attempt to answer the question.

Table 2		
Different age groups	Number of Students	Percentages %
Between 6-10 years	11	20.4
Between 11-15 years	23	42.6
From 16years and above	18	33.3
Never indicated	2	3.7
Total	54	100

Table 2: Age and use of ICTs and Internet

Results showed that most of the students were exposed to the use of ICTs and the Internet when they were 11 to 15 years old. These results correlate with findings of Czerniewicz & Brown (2010, p. 367) indicating that most students started using ICTs at the age of 12 years. According to Helsper & Enyon (2009, p. 503), experience and breadth of use of the Internet and ICTs should determine whether they were digital natives.



4.4 Owned Devices

Question 4 was asked to identify the electronic devices or ICT tools owned by the respondents. Generation Ys are believed to own a variety of electronic devices and were surrounded by different technologies since they were born. Respondents were requested to select from a listed of devices that they owned. More than one device could be selected. Results displayed in Figure 5 below show that there were 41 (77.4%) participants who indicated that they owned laptops, 14 (26.4%) owned Tablets or Notepads, 44 (83%) owned smart phones, 10 (18.9%) owned MP3 players, 40 (75.5%) had head/earphones, and 21 (39.6%) participants had personal computers. A smart phone was the device most owned by participants. Similar research done by Coombes (2009, p. 36), found that the majority of respondents indicated to own mobile phones and stated that they could not live

without them. Czerniewicz & Brown (2013, p. 49) also indicated that because some students come from disadvantaged backgrounds, devices such as computers were beyond their financial reach. For Internet access smart phones are therefore a necessity.

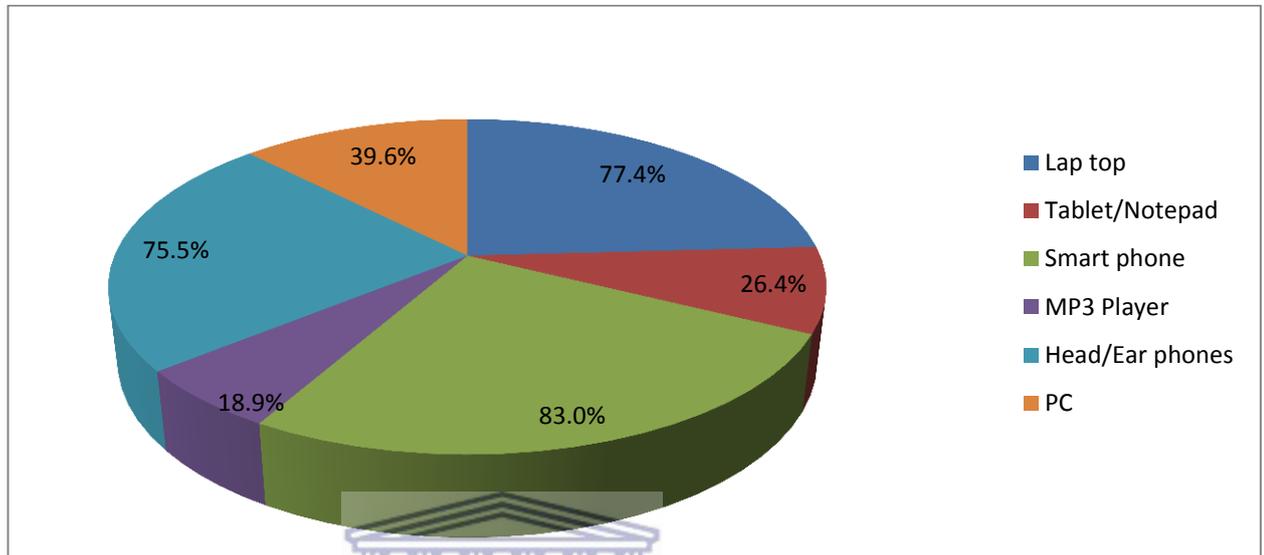


Figure 5: Devices owned by students

4.5 Access to computer and Internet off campus

WESTERN CAPE

Generation Y is known on a daily basis be constantly using the Internet and computer facilities. Questions 5 – 8 were asked to determine if the respondents had access to computers and Internet facilities when they are off campus. Questions 5 and 6 required the respondents to indicate whether they used computers off campus and if that was the case, where they get access to computers. Questions 7 and 8 required participants to indicate whether they had access to the Internet off campus and if that was the case, where access was gained.

Data gathered and reflected in Table 3 below indicate that the majority of students had access to computer facilities and the Internet off campus. Of the participants 48 (88.9%) had access to computers and 42 (77.8%) had access to the Internet off campus.

Table 3		
N=54		
	Frequency	Percentage
Computer access: YES	48	88.9
: NO	6	11.1
Internet access : YES	42	77.8
: NO	12	22.2

Table 3: Access to computers and Internet off campus

4.5.1 Access to Computer off campus

In South Africa, students come from different backgrounds resulting in some of them, according to Czerniewicz & Brown (2013, p. 48), coming from areas without infrastructure such as basic electricity. Many South African students do not have their own computers and must access the facilities at community centres, work places, schools and libraries. Therefore question 6 asked respondents to identify places where access to computer facilities was gained when they were off campus. This question permitted respondents to select more than one option. Results indicated that nine (17.3%) had access to computers at work, 42 (80.8%) where they live, 20 (38.5%) at friends, 33 (63.5%) at the public library, and five (9.6%) at community halls. The majority of respondents had computer facilities where they lived.

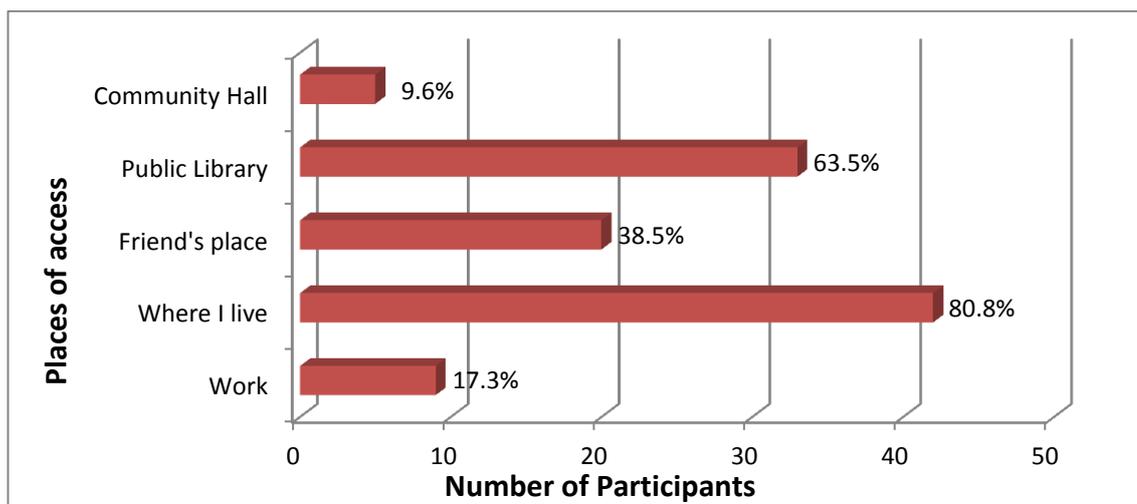


Figure 6: Places of access to computers

4.5.2 Access for Internet Off campus

Question 8 was asked to find out where respondents obtained access to the Internet when they were off campus. This was to prove that they were true Generation Ys who spent most of their time on the Internet, not only while on campus with free access to Internet. In Figure 7, results gathered exhibited that 29 (54.7%) accessed the Internet on home computers, 43 (81.1%) on smart phones, 33 (62.3%) at the library, 27 (50.9%) in Internet cafes, and 32 (60.4%) accessed it in computer laboratories.

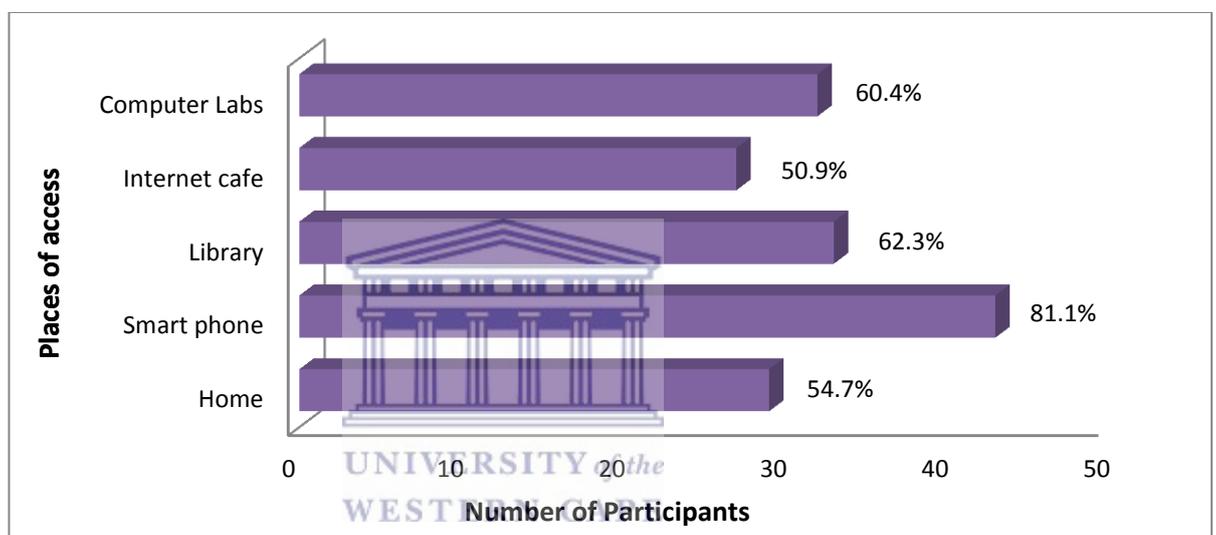


Figure 7: Internet access off campus

Different types of connections are used when connecting to the Internet. The participants were asked in question 9 to indicate what they used off campus when connecting to the Internet. Results showed that five (9.3%) used dial up, thirty-nine (72.2%) of the participants used the service provider of their smart phones for connection and 31 (57.4%) used wireless connection. Most of the respondents used their mobile phones in order to connect to the Internet when they were off campus. Research done by Czerniewicz and Brown (2010) also concluded that most of the Generation Y students used their cell phones to get access to the Internet when not on campus, and that among South African students cell phones ownership was abundant. It was the main means of access to the Internet when off campus.

4.6 Use of ICT tools

Question 10 was asked to determine the frequency of usage of the Internet and ICT tools in their everyday lives. The question was based on the fact that Generation Ys are known to be digital natives, constantly using digital tools. Options provided on this question for the respondents to select from were throughout the day, once a day, twice or thrice a day, once a week and other - please specify. Results in Figure 8 below display that 35 (64.8%) used the Internet throughout the day; five (9.3%) used it once a day; 12 (22.2%) used it at least twice or thrice a day and one person (1.9%) indicated that they used the Internet once a week. Responses on the 'other-please specify', option, were not usual and never.

Most of the participants indicated that they often browsed the Internet throughout the day. In response to how the students frequently made use of the different ICT tools, most of the students worked on spread sheets once a week (27.8%); slide presentations once a week (33.3%); word processing once a day (29.6%); watched videos online throughout the day (24.1%); listened to music online throughout the day (27.8%); played games online once a week (16.7%); read websites once a week (29.6%); and uploaded digital images on social networks once a week (27.8%). Findings correlate with the study done by Coombes (2009) where most of the respondents indicated that they frequently used the Internet on a daily basis. The majority of the time was spent playing games, chatting, listening to online music and surfing the net.

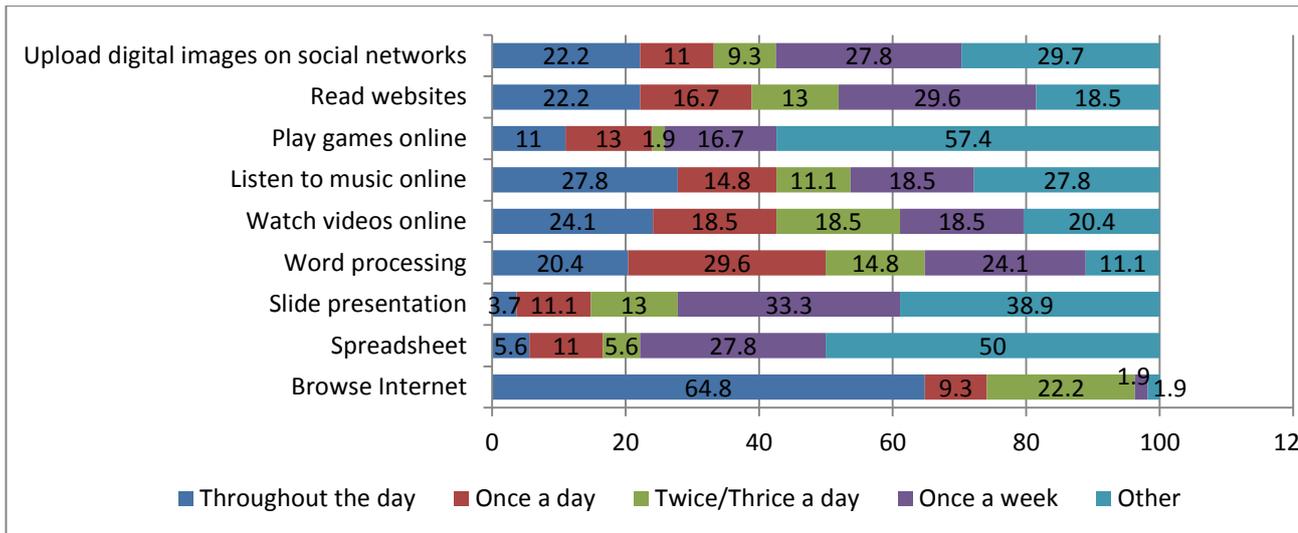


Figure 8: ICT Usage

4.7 Social media

Question 11 asked the respondents whether they had social networking accounts. Social media is a common mode of communication used in this digital era, but more popular with the Generation Ys. As displayed in Figure 9, 51(94%) indicated that they had social networking accounts. According to Czerniewicz and Brown (2013, p. 51) the reason students used social media and web based chats was because it offered cheap and effective ways of engaging.

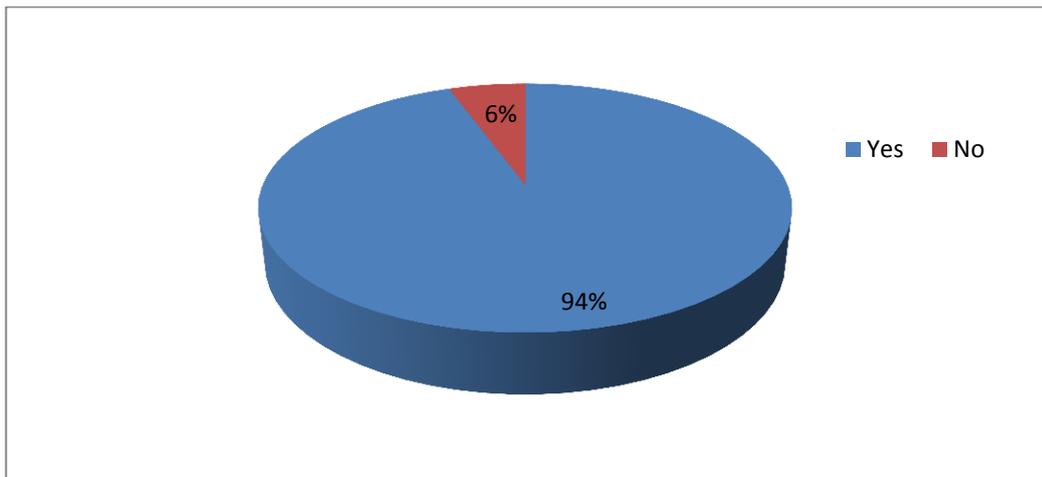


Figure 9: Social Networking Accounts

4.7.1 Different social networking tools

Question 12 required respondents to supply names of the social networking accounts used. This was to identify the most popular social networking tools accessed by the students.

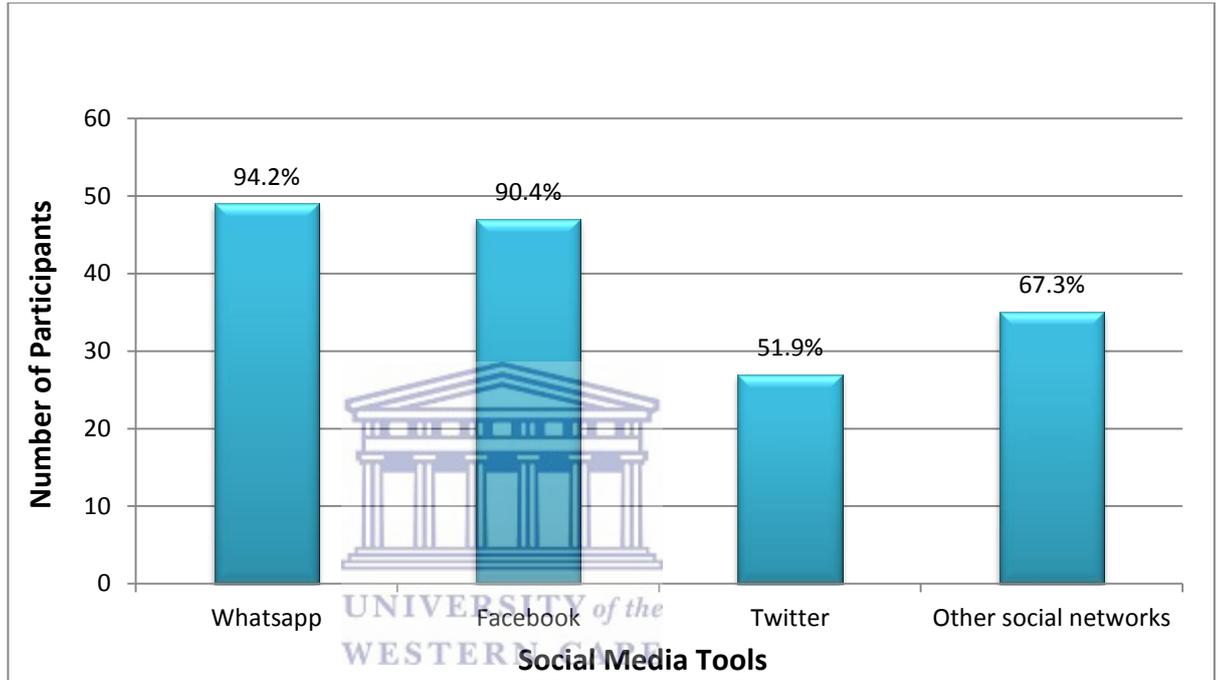


Figure 10: Social Networking Tools

Figure 10 above exhibits that 49 (94.2%) had WhatsApp accounts; 47 (90.4%) had Facebook accounts; 27 (51.9%) had accounts on Twitter; and 35 (67.3%) had other social networking accounts such as Instagram, Pinterest, Viber, Skype and WeChat. The most popular social networking tools used by the students were WhatsApp followed by Facebook. Zimmerman (2012, p. 177) mentioned that digital natives are comfortable to use Second Life, twitter, Face book, Myspace, YouTube and Flickr for taking pictures, uploading, editing and sharing any kind of information online with friends.

4.7.2 Mode of communication

In response to question 13, participants had to indicate what mode of communication they preferred. Most of the time, Generation Ys are constantly on their phones. Results presented in Figure 11 below show that 13 (24.1%) preferred calling; 31 (57.4%) texting; and 10 (18.5%) preferred both texting and calling. The majority of students preferred texting over calling. According to Thinyane (2010 p. 411) most university students used their phones for texting rather than calling. Niles (2011, p. 49) also stated that millennial students choose to use emails, send text messages or chat as preferred modes of communicating.

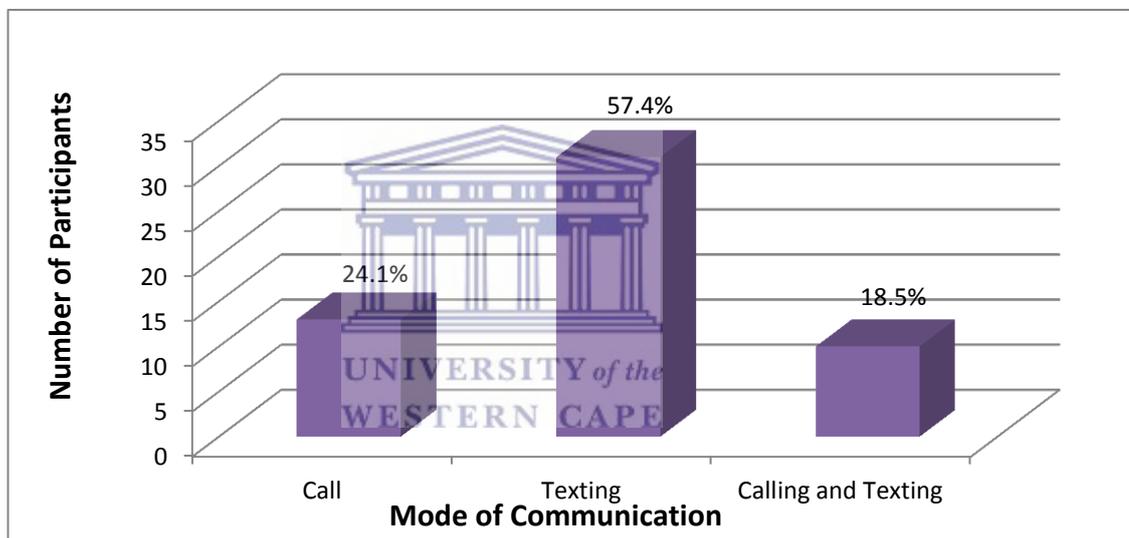


Figure 11: Communication Preference

4.8 Learning to use computers

Question 14 asked respondents to indicate how they had learned to use a computer. One of the characteristics of Generation Ys is that they teach themselves to use computers rather than being formally taught. Responses to this open-end question were grouped as purely self-learning (“trial and error”), self-learning with assistance from others, self-learning with assistance from digital academic literacy classes (DAL) at UWC and at computer literacy classes at

primary and secondary schools. Results in Table 4 indicate that 15 (27.8%) participants learned through self-learning (“trial and error”); 21 (38.9%) had computer literacy classes at primary and high school; six (11.1%) through self-learning, friends and family members assistance and 12 (22.2%) was through self-learning and DAL classes at UWC.

Table 4		
	Frequency	Percentage
Self-learning (trial and error)	15	27.8
Computer literacy classes in primary and high school	21	38.9
Self-learning, friends and family members assisted	6	11.1
Self-learning and DAL classes at UWC	12	22.2
Total	54	100

Table 4: Learning to use computers

Gathered from the results was that computer literacy classes played a major role in assisting the students to learn how to use computers. According to Prensky (2001, p. 3), to familiarize them with digital technology, this generation has either taught themselves or through social networks. Friends or family usually are part of the social networks. Czerniewicz & Brown (2010, p. 860) also stated that in South Africa most students had no access to computers before coming to universities, thus most of them have learnt to use computers at tertiary level through short courses and exposure to computers.

4.9 Multitasking

Question 15 was asked to find out if respondents engaged in different activities while in lecture halls. This generation has been exposed to a variety of ICTs as such they are seen having or carrying more than one device and constantly using these gadgets. Figure 12 indicates that there were 29 (54%) students who indicated that they engaged in other activities while attending lectures. According to Rowlands et.al. (2008, p. 299) it is likely that because Generation Ys were

exposed to ICTs, they might have developed good parallel processing skills. Zimmerman (2012, p. 177) also stated that they can be listening to a podcast, use a computer updating blog or a wiki or even putting together a movie online at the same time.

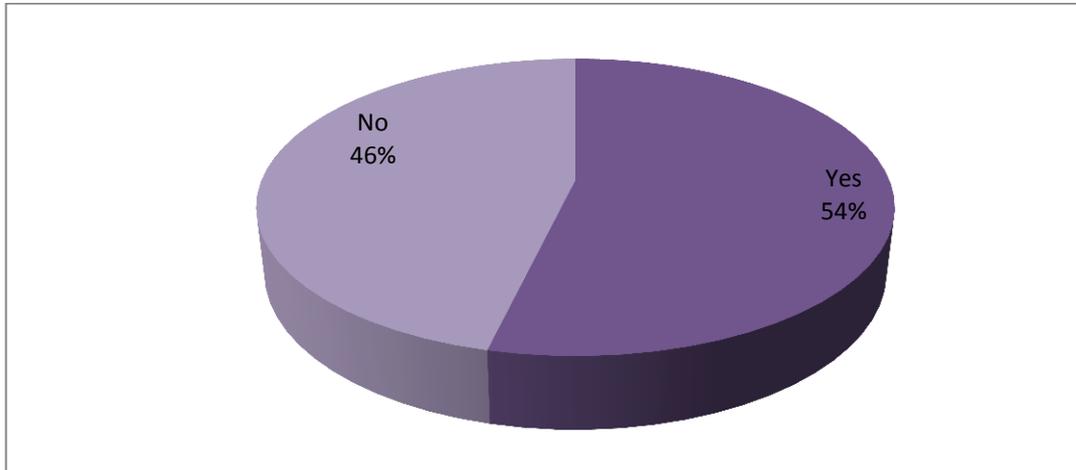


Figure 12: Multitasking



4.9.1 Frequency of usage of technology devices simultaneously

Question 16 requested respondents to indicate how often they used two or more technology devices concurrently. This question was more or less similar to the preceding question but probed in a different approach. From Figure 13 below, it can be concluded that 27 respondents (50%) used devices simultaneously and very often, 11 (20.4%) often, 13 (24.1%) occasionally and 3 (5.6%) never. A slight majority of the students often used more than one technology device at the same time.

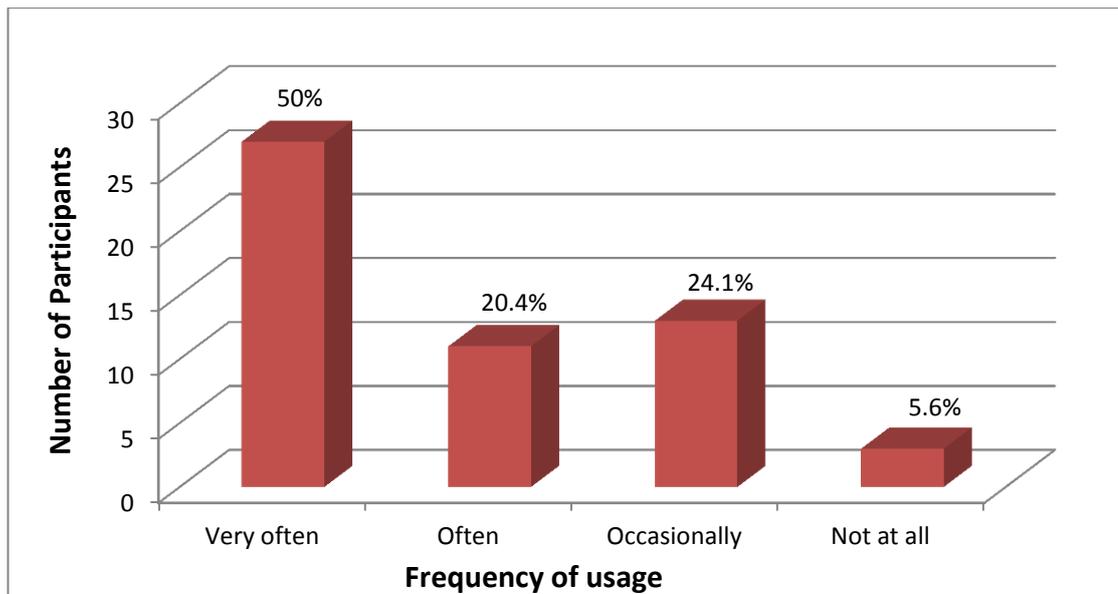


Figure 13: Simultaneous usage of ICT devices

4.10 Conclusion

Results gathered from the questionnaires were used by the researcher to identify participants to be used for interviews. Results from the questionnaires indicated that the majority of the participants were between the ages of 18 to 22. These students were exposed to the use of ICTs and Internet between the ages of 11 to 15. The results also showed that the students owned different types of technology devices. A large number of the participants owned smart phones. It was gathered that the students had access to computers and Internet not on campus only, but also off campus. Seventy-two percent of the participants accessed Internet through their smart phones.

The overwhelming majority (94%) of students have social networking accounts. The participants learnt to use computers through computer literacy classes offered in their primary and high schools. Twenty-seven percent of the participants became computer and ICT literate through self-learning (trial and error). More than half (54%) of respondents engage in typical Generation Y style in different activities at the same time – in other words multitasking. Fifty percent of the students engaged very often in two or more technology devices simultaneously.

Results gathered from the fifty-four questionnaires, indicated that not all of the respondents were Generation Y as indicated in the literature review. The researcher had to select those students that exhibited more characteristics.

On the questionnaire respondents were asked to give their students' number. Using the university emails, the researcher sent letters requesting the respondents to participate in the interview (see Appendix D). Discussion of results gathered during interviews conducted among seven students is presented in the next chapter.



CHAPTER 5

RESEARCH FINDINGS: Interviews

5.1 Introduction

This chapter presents and discusses findings of interviews implemented in the second phase of the study. The second phase was conducted in order to gain understanding of the information seeking of a Generation Y student at UWC. Narrative plain text was used to present collected data. Interviews were executed with four female and three male participants. The seven participants were selected purposely from the few who responded to the email that was requesting them to take part in the interviews. The majority of the respondents wrote non-existing student numbers on the questionnaires. Therefore it was difficult for the researcher to request them to take part in the interview.

The criteria used when selecting student that participated in the interviews was based on the characteristics displayed by the student from the results obtained from questionnaires. Questions on the questionnaire were derived from characteristics of Generation Ys, baring it in mind that most students in South Africa did not grow up surrounded by technology at a tender age.

Presented are different themes identified when the researcher did thematic analysis which was relevant to the research problem (Appendix F). Firstly presented are different sections of information derived from interviews with the use of an interview guide (Appendix C). Data gathered has been presented in different sections, namely section 1 information needs; section 2 information grounds; section 3 challenges; section 4 UWC environment; and section 5 influences.

5.2 Programs enrolled for, at UWC

Question 1: What course are you doing at UWC?

This was an ice breaker question to relax both researcher and interviewee. The students interviewed were from a variety of departments at UWC. The programmes which the students had registered for included BCom accounting, BLIS, BSc physical science and BA Psychology. The majority of the participants were undertaking undergraduate studies at UWC.

5.3 Section 1: Information Needs

Question 2: What are your everyday information needs?

The question was asked to establish what the students' information needs were based on. Every individual has conscious and sub-conscious information needs and information seeking is motivated by an information need. Information needs stated by participants were based on the tasks set by lecturers for the different modules they are enrolled for. Their general information needs were celebrity news or gossip; trending news (like the Oscar Pistorius case); movies; music; trending fashion; emerging technology gadgets; weather; cooking lessons; politics; traffic updates; online television series; food; sermons; inspirational stuff; local soap operas; online groceries and specials; people's status on Facebook; lift clubs; church staff; sports, people's lives; health and general things.

Example of responses:

Interviewee No. 4: *"I need information just to make decisions, weather, news, sometimes fashion. Sometimes I need information that I don't have courage to ask my mother or librarian like sex stuff [giggle]."*

Interviewee No. 5: *"....information needs change, it depends on what am passionate about around that particular time like now my passion is on the book*

that I am writing. My information needs revolve around the subject covered in my book which is economics and accounting”.

Interviewee No 7: *“I love local and international celebrity gossip, but it is not really gossip, basically it’s more like what is said about them on media.”*

5.4 Section 2: Information Seeking

5.4.1 Information Grounds

Question 3: Which places of interest do you go to?

The researcher was interested in identifying different places where students spent their time. The question was based on two theories that indicated that information may be gained in formal as well as informal places. Places the participants usually visited during their everyday lives were places on campus (since they were students) as well as off campus. Places mentioned were lecture halls; library; computer laboratories; home; café; church; food lovers market in Cape Town; Waterfront; friends’ places; Sea Point restaurants; cricket field at UWC; Cape Town malls; and around the UWC campus.

Interviewee No. 4: *“Since most of my time am on campus am usual in my car or the different lawn areas around. Me and my friend have different names given to each area around campus, like ‘condom square’ that area next to The Barn; ‘Judgement Avenue’ and ‘Muslim square’”.*

Interviewee No. 1: *“My best place is home in front of the television with my phone or church”.*

Interviewee No 2: *“Most of the time we at the library with my friend. Off campus we like going to the Food Lovers market in Cape Town or Waterfront. We have different backgrounds I have been staying in Germany and America before I came here she lived in England and South Korea. We go out so that we can try out so many things like different kinds of tea and sushi”.*

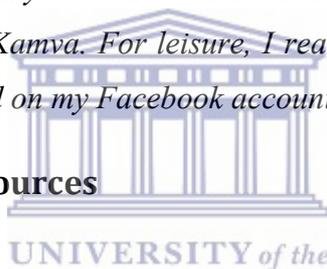
Question 4: In which places do you find information related to your leisure and academic needs?

The theories used in the study indicated that information can be gained in any place, thus the researcher wanted to find out if that applied to these students. This question was similar to the previous one but was more specific. The aim of the question was to identify different places students go to in order to satisfy their information needs. Most of the participants indicated that the Internet was the best place to find all kinds of information needed. The participants also gained information in lecture rooms and in the various places of interests that they visited.

Interviewee No 5: *“The malls, my cousin’s place and lecture halls.”*

Interviewee No 2: *“For my academic work its lecture rooms, library, university email, eTeachings and iKamva. For leisure, I really can’t say because at times I read links that are posted on my Facebook account.”*

5.4.2 Information Sources



Question 5: If you need information, where do you start searching?

The question was asked in order to gain understanding of where the participants retrieved data to quench their information needs. A variety of sources are available for students to use, most in both printed and electronic format. The participants indicated that their starting point when searching for information depended on what they were looking for. For their leisure activities it was the Internet, social media and friends. For their academic work they used lecture hand-outs, sources stipulated by the lectures, the Internet and the library. Analysed results indicated that most participants will first use the Internet.

Interviewee No. 4: *“I use Google for almost every information need. There are things that I can’t ask my parents about (sex issues), so YouTube has answers to such information needs”. I sometimes ask my Dad for news and my grandfather for South African politics.”*

Interviewee No 3: *“Internet is my first stop. It sometimes happens unplanned like when I check my emails (I have a Yahoo account). When I go to that page you find interesting topics or headlines then you click and read more. At times I ask my boyfriend.”*

Interviewee No 5: *“The Internet, reasons being its quick, no frustration and I haven’t been trained on how to use the library properly. When I go to the library it feels like am wasting minutes, with Internet in five seconds you there.”*

Question 6: What are your preferred sources of information?

Although different sources of information are available, information seekers usually prefer to use particular sources. It is usually sources that the information seeker is familiar with and therefore finds it easy to use. As this is an aspect of information behaviour, the researcher thought it was important to ask a question regarding information source preference.

Different information sources indicated by participants were: books, television, radio, lectures, library databases, movie websites (IMBB), YouTube, e-mails, newspapers, social networks (Facebook, Instagram, Twitter, Pinterest, WhatsApp), Google scholar, academic websites, friends, magazines, UWC website (student portal, e-Teaching, iKamwa), family, Wikipedia and 9gag (an online platform where users share videos and images). Most of the sources indicated by the participants were web based. Although web based sources were the most preferred sources, participants indicated that it all depended on what the information need was. For academic work most lecturers expected printed sources.

Interviewee No 1: *“I prefer the Internet as the source of information as well as friends and books since I love readings. Advertisements play a major role on providing information, so I listen to the radio and watch TV. I prefer lecturers and friends as well, based on what we doing in lectures.”*

Interviewee No 2: *“I don’t necessarily have preference to any information source, it just happens spontaneously. I read newspapers when am home because they buy*

them, my radio is always on (CC Fm and Good Hope radio stations). These radio stations assist me on traffic updates, weather and news making headlines.”

Question 7: When assigned a task, do you prefer working alone or in a group?

One of the characteristics of Generation Ys is that during searching for information, they prefer to work in groups. The reason thereof being that during group work, knowledge is shared among group members. The researcher was interested in finding out if that applied to UWC Generation Ys.

In contrast to the above mentioned characteristic of Generation Ys, all participants stated that they liked working alone.

Interviewee No 1: *“I prefer working alone, last year [2013] I was working with my friends”.*

Interviewee No 5: *“That’s a tough question. It depends on the task and the team but most of the time I work alone”.*

Interviewee No 6: *“I prefer working with my friend but, most of the time alone”*

Question 8: How often do you go to the library?

This question aimed at identifying the frequency of library usage. Students are known to visit the library for different reasons. It can be to meet with friends, loan books or use other library facilities. The university library has web based services allowing library users to access services and sources online available. Students therefore do not have to physically go to the library but access and retrieve information online.

Mixed responses were given by respondents. Some participants indicated that they used the university library very often since they were still studying. Some participants stated that they rarely visited the library.

Interviewee No 4: *“I do not go there very often because I can access the databases even at home; well I go there to charge my cell phone or laptop”.*

Interviewee No 5: *“I have used the library let’s say nine times since I am around. I go there for the Internet basically.”*

Interviewee No 3: *“I use the library all the time when am on campus.”*

Question 9: Which places in the library do you prefer to use?

This was a follow up question to find out which levels of the library are used by the participants. The library offers above providing an extensive library collection based on curricula offered by the university, different services and facilities. This includes amongst others study halls, post graduate laboratories, photocopy machines, foyer, reading/seminar rooms and a knowledge commons.

The different places in the library used by participants were the foyer, level 11, level 14, level 8 and the knowledge commons.

Interviewee No1: *“I like going to level 11 when studying and level 14 as well. I like a quiet place because it encourages one to read.”*

Interviewee No 4: *“I use the foyer for charging my cell phone battery and laptop. I go to level 8 when I need books. When it is quiet I also like using level 8 next to the window, have a nice view of the campus (‘Muslim square’) and unwind.”*

Interviewee No 6: *“Foyer, computer lab, level 11 and 14. I use the foyer for relaxing I switch on my laptop and listen to music. I use level 11 when I need a bit of distraction because it has a bit of both, quiet and noisy. When I want to concentrate and be alone I use level 14.”*

Question 10: Do you use library databases?

This question was based on the fact that research has proven that many students are not aware that when accessing the library databases, they are using one of the library’s services. The researcher also wanted to establish if the library databases are used by the students for their academic information needs.

When some participants were asked this question, the researcher had to briefly explain what library databases were. This was because the researcher picked up

from facial expressions that the participant was puzzled or a bit confused. Some participants indicated that they do not know how to access the library databases. Others used them only when prescribed by lecturers.

Interviewee No 1: *“No I don’t use library databases. My course is more on practical work and less assignments. The last time I looked at them was when we did library tutorials. We are only given an assignment once.”*

Interviewee No 3: *“Yes, I use them for my assignments and just to check on what the lecturer was talking about.”*

Interviewee No 5: *“Yes, only because we were introduced to them. I feel Google is a strong competitor for library databases because Google is offering a lot of services.”*

Question 11: How do you keep yourself up to date with information?

The reason for the question how respondents keep up to date with information was that information changes frequently. The question wanted to determine whether the participants had certain patterns to keep themselves up to date in order not to feel left out and be aware of what is going on. One pattern for example, can be constantly reading from books, periodicals or visiting websites, blogs, alerts and social networks.

Most of the participants before answering this question indicated that this was a tricky question in the sense that they cannot really call it ‘keeping up to date’. They indicated that they sometimes read because they have to or have tasks (assignments) to complete. Some indicated that they would after talking with friends, will read to verify what they already know – mostly social networks. From the interviews it can be deduced that keeping up-to-date mostly happened accidentally.

Interviewee No 2: *“I check the Internet and social media. On Facebook people post links that when you click lead to a story, for example the Beyonce and Jay*

Z's story. I click on links that is of interest to me. With my academic work I speak to friends and check my social networks”.

Interviewee No 1: *“I just love reading, so I read all the time as well as talking to my friends”.*

Interviewee No 4: *“It is not like keeping up to date but it depends on what kind of information am looking for, for academic it's the university email although I don't like emails. I also use e-Teaching and iKamwa. I also use Internet and social networks, if you don't communicate with people you get out of what is happening and you miss things.”*

Interviewee No 5: *“I watch news during the day - not at night. I basically use online media, read blogs in order to be part of the community”.*

Question 12: Do you share information that you have gained?
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The reason for this question was that Generation Y uses different ICTs, is constantly connected and uses several social media tools to access and share information. This information was gathered when analysing the questionnaires in the first phase. All respondents listed social networking tools they had accounts for. Information sharing is bound to happen when people interact.

Participants indicated that they shared information. The Internet and social media has made sharing easy. Most of the time the participants shared the most talked about or popular stories or stories making headlines (trending news) in different media. ”Trending” is now a common term used to describe popular or most talked about news making headlines. At times they would share academic work since they were students.

Interviewee No 7: *“Yes I do share information. Most of the time I use Twitter just send a link. On Twitter I follow a lot of people who have same interest like me.”*

Interviewee No 6: *“Yes with my only friend, most of the time its academic things and what is trending”*

5.4.3 Reliability and trustworthiness of information sources

Question 13: How do you evaluate the reliability of the information sources and the information gathered?

This question was firstly aimed at probing Generation Y students to determine if they had the ability to find information of quality and credibility among the vast quantity of information. Secondly the question was aimed at gaining insight into how students will rank retrieved information and how they evaluate information to suit their particular information need. It was also essential for the researcher to understand the criteria used by Generation Y to accept or reject information in their everyday lives.

In response to this question, all the participants would giggle first or have funny facial expressions. These expressions gave the researcher the impression that they did not verify their sources. Some participants indicated that evaluating information will depend on the kind of information they needed and will therefore occasionally verify it. Some of them said they did verify the trustworthiness of information and information sources mostly for their academic work.

Interviewee No 5: *“Sometimes I accept it blindly [laughing]. I only check the authors when doing assignments and I don’t trust newspapers”.*

Interviewee No 1: *“I don’t want to lie, I don’t do that. I just relate the information I get to the one I have or to what the lectures have told me. I also do not like ‘Turn it in’.”*

Interviewee No 2: *“I check for authors [laughing], really I don’t check”.*

Interviewee No 4: *“I usually do this for my academic work, depending on the marks of the assignment. I love using Wikipedia; I click on the footnotes links which take me to the original source. With other links I find broken links making it hard to confirm”.*

5.5 Section 3: Challenges

Question 14: Do you encounter challenges during information seeking?

This question was aimed at identifying challenges, obstacles and problems students faced while searching for information. Although Generation Ys have a wide variety of information source to choose from, the researcher wanted to determine if students have the ability to find the needed information from the available sources.

The participants stated that they encountered challenges during their information seeking. Most of the challenges encountered while searching for academic information were based on the frustration of information overload, finding the same sources over and over (recurring sources) and the unavailability of the Internet at times.

Interviewee No 4: *“Yes, especially when looking for academic information. There is such a variety of sites; it becomes frustrating which source to use and the trustworthiness of the information. Also when I have to refine the search in order to find the relevant information.”*

Interviewee No 3: *“Sometimes, when the Internet is down, I guess the Internet is my everything so if it’s down I am stuck”.*

Interviewee No 5: *“Everything is easy and thanks to Internet. I guess the only challenge is finding repeatable [same] sources”.*

Interviewee No 7: *“Information overload. There is too much information in the Internet making it difficult to choose the right source.”*

Question 15: When experiencing these challenges, to whom do you first turn for help?

This question was aimed at identifying people Generation Ys at UWC will consult when they encounter challenges while searching for information.

Participants indicated that the person they will approach for help will depend on what challenges they were facing. Most participants identified their friends as the persons they would ask for assistance. Acquaintances and lecturers were also mentioned. Even though respondents were asked to identify a person, an interviewee indicated that he/she would use the Internet. Some participants mentioned that if they were in the library, they will sometimes consult librarians.

Interviewee No 4: *“It depends on what kind of information I am looking for. With my academic work I go to my friends first then lecturers. Friends are better because of the personal relationship I have with them, whereas with lecturers I feel insecure. Lecturers will think you are stupid you can’t do this”.*

Interviewee No 2: *“Woooo! My friends” [with confidence].*

Interviewee No 1: *“It depends, if am in the library I ask the librarian and if it’s something to do with my academic work I send an email to my lecturer”*

5.6 Section 4: UWC environment

Question 16: Does the UWC environment influence the use of the Internet and ICTs?

With this question the researcher wanted to find out if the UWC environment had any influence on the usage of technology and the Internet in the information seeking process. Given the fact that on the UWC campus free Internet (Wi-Fi) connection was provided, students accessed the Internet using their laptops, smart phones or Tablets. In the library the Knowledge commons provides access to networked computers that are linked to printers. There are also several computer laboratories around campus that provide computers and Internet access.

The participants indicated that the UWC environment had both positive and negative influences. It was positive in the sense that the Internet is convenient for both their academic and general information requirements. On the other hand it can be regarded as negative in the sense that it was a source of distraction.

Interviewee No 3: *“It has a positive influence because it shows that UWC is efficient in making sure that as students we have instant access to information. For the fact that one is able to get information while at home through eTeachings and the university email. Sometimes it sometimes makes you lazy to even come to campus”*.

Interviewee No 5: *“I would say positive in the sense that I was living in England before I came here. So I have been on Internet all the time, it would have a negative influence if there was none.”*

Interviewee No 6: *“Bad influence because as much as I have a laptop, when I see so many people around campus having tablets I wish could have one too. Sometimes you pay less attention to your academic work. At the same time good because I can’t afford to buy a lot of books due to my background, so the Internet offers more information to use and makes me lazy to read printed sources from the library.”*

Question 17: How can you rate the Internet access at UWC campus?

Generation Ys want to be constantly connected to the Internet. This question was aimed at establishing if the Internet on campus attained to those basic needs of this particular age group while on campus.

The Internet was rated according to the accessibility. The participants indicated that it was fair and some said it was highly accessible. A few of them highlighted that the Internet was slow.

Interviewee No 4: *“Out of ten I would give it three and a half, because if you want internet you should be in some places”*.

Interviewee No 5: *“It’s accessible but slow and it sucks”*.

5.7 Section 5: Influence

Question 18: Does technology have a positive or negative influence on your information seeking?

This question was aimed at establishing the role played by technology in their information seeking. Generation Ys are known to have grown up being surrounded by ICTs - either since birth or from a tender age – and to be used to finding information easily and quickly. The researcher wanted to firstly confirm that technology and the Internet played a major role in information seeking of the Generation Y students and secondly to determine whether it had a positive or negative influence. Analysing the different expressions and body language of the participants, the researcher deduced that the participants believed that the Internet was all they need for their information seeking.

Interview No 4: *“Positive, positive, positive. It is about privacy, people should not judge you based on what information you access. When using technology tools and internet for information search is so easy and private, I Google and clear search history after, unlike when you ask a librarian. Let’s say you loaning out this book, he or she would you give you a certain look over the rim of the glasses (demonstrating the look). When looking for information you don’t want everyone to know.”*

Interviewee No 3: *“Technology has a positive impact and makes my life easier. Whatever information you need like anything even when you want to cook something, YouTube is there.”*

Question 19: Do you fully depend on the Internet for your everyday information seeking?

Since Generation Ys believed that the Internet has all the answers to their information needs, this question was aimed at determining whether participants

fully depended on the Internet for retrieving information as well at summarizing the interviews by supplying a platform for the participants to express or vent their views on the use of the Internet while searching for information.

In concluding the interviews, most participants indicated that they were fully dependent on Internet for their everyday information needs. Some participants stated that they did not fully depend on Internet, but it played a major role during their information seeking.

Interviewee No 6: *“Nasty yes, I don’t think I can live or love life without it. Actually I have a proposal or request directed to the President of South Africa. To talk to the American President so that we have free Wi-Fi connection everywhere in the country.”*

Interviewee No 5: *“I will be lost without it”*

Interviewee No 4: *“Yes definitely, let’s say between 75 and 80 percent. Most of my life revolves around social media and internet. If you do not communicate with people you get out of what is happening and you miss things.”*

Interviewee No 3: *“Yaaa [yes] pretty much [laughing], if not I ask my friends.”*

Interviewee No 2: *“Not fully but it plays a major role. Let’s say 70%.”*

5.8 Conclusion

The above discussion has described information behaviour of Generation Ys at UWC. The themes, however gained a balanced understanding of the information seeking of Generation Y at UWC. Gathered was:

- The participants information needs were mainly based on their academic work and general information needs.
- The participants gained information from formal places such as lecture halls and informal places such as cafeterias.

- Information sources used by students included printed, web based sources and people. The information sources were based on what information need the students had, thus the students might or used different sources for an information need.
- Participants rarely went to the library building and some indicated that they were not familiar with the library databases.
- In terms of verifying trustworthiness of information sources used, participants occasionally or never verified them.
- Challenges encountered by students in the process of information seeking, were information overload and finding same sources repeatedly.
- The Internet had played a major role in their everyday information seeking of Generation Y students at UWC. For example, evidence from the participants' interviews indicated that a majority of the seven students acquire information based on needs from the Internet.
- Participants experienced both positive and negative influence on the UWC environment. Positive influence in the sense that it was conducive or convenient for the students to access any kind of information because of the facilities and services rendered at the university. Negative influence because of the availability of the Internet brought some kind of distraction to students; and not being able to access information source when the Internet is down.

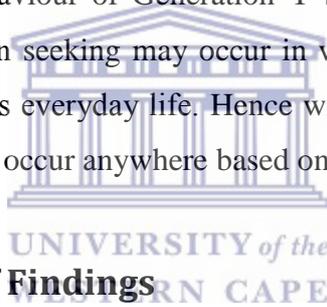
The next chapter will unite the data across the two phases of the study in returning to the research questions identified in Chapter 3.

CHAPTER 6

DISCUSSION OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter provides a discussion of the main findings of the study, discussed in the context of the research questions. It also converges the two phases of the study in order to return to the research problem and answer research questions as identified in previous chapters. Two theories (ELIS model and Pettigrew's Information Grounds theory) were used by the researcher to understand the information seeking behaviour of Generation Y students at UWC. ELIS model indicates that information seeking may occur in work related and leisure related context of an individual's everyday life. Hence with Information Grounds theory information seeking may occur anywhere based on the presence of individuals.



6.2 Discussion of Findings

The chapter interprets data gathered and summarised in Chapter 4 and 5, in an attempt to give answers to the following research questions:

- What are the characteristics of a Generation Y UWC student?
- What are the everyday and academic information needs of Generation Y students at UWC?
- How do Generation Ys at UWC locate information for their everyday as well as for their academic information needs?
- How do Generation Y students at UWC evaluate retrieved information?
- How does the use of technology affect Generation Ys information seeking behaviour?
- What are Generation Y students' information grounds?

- What are the barriers faced by Generation Ys in their information seeking?

6.2.1 What are the characteristics of a UWC Generation Y student?

In attempt to answer this research question, data was gathered using questionnaires. The first phase of the study was to identify or find out if UWC campus had Generation Ys. Thus, the questionnaire encompassed questions basically derived from characteristics of Generation Ys as discussed in the literature review in Chapter 2. Different authors and researchers mentioned a number of characteristics, styles and habits portrayed by Generation Ys which included:

- South African Generation Ys are said to be born between the years 1980 – 2001 (Goneos-Malka, 2011 and Jones & Shao, 2011), thus meaning that during this study they were between 13 and 34 years old. The majority of the respondents were between 18 and 22 years old, therefore they were the right ages for Generation Ys and qualified to be part of the study.
- Generation Ys are born surrounded by and exposed to ICTs at an early stage of their lives, use digital tools like computers, cell phones and music players and speak digital language (Czerniewicz & Brown, 2010, p. 363 and Prensky, 2001, p. 1). With UWC Generation Y students, few were exposed to ICTs at an early age. The majority of them were introduced to digital tools from age 11 to 15 and should be regarded as ‘digital strangers’ or ‘digital immigrants’ but have adapted to the digital environment through experience and exposure.
- Generation Ys are known to own a couple of digital devices as part of their life style. UWC respondents owned a variety of digital tools, such as laptops, Tablets, personal computers, smart phones, MP3 players and head/earphones. Amongst the ICT gadgets, smart phones were the most devices owned by students. The reason might be that smart phones perform many computer functions and are easy to carry around.
- According to Metzger, Flanagin & Zwarun (2003, p. 275), Generation Ys are comfortable computer users because they began using computers during early

childhood (between the ages 5 and 8). By contrast the majority of participants that have taken part in the study learnt to use computers through computer literacy classes in primary and high school.

- Generation Y's are constantly connected to the Internet (Prensky (2001, p. 1). UWC students also had access to computers and Internet both on and off campus. According to Anderson & Rainie (2012), they are constantly plugged in and counting on the Internet as their external brain.
- According to Lippincott (2010, p. 28) this generation uses technology to access, create and use information. They spend most of their time using technology for basically everything they do. Respondents indicated that they used the Internet throughout the day. They also worked on a spreadsheet, power point slide presentation, processed word documents, watched videos online, listened to music online, played games online, read entertainment/news related websites and uploaded digital images on social networks. This was an indication that Generation Y used technology daily or frequently for a multitude of purposes.
- Lippincott (2010, p. 29) as well as Jones (2002, p. 3) stated that Generation Y preferred instant feedback, hence they were hooked on social media. UWC respondents had different social networking tools and the majority used WhatsApp and Facebook. As such, Generation Y has a form of shorthand text communication that has emerged together with visual symbols to convey emotions used on social networks.
- Goodstein (2008) stated that because of multitasking, Generation Ys preferred 'bite-size', short and brief messages especially if delivered on line or by smart phones. The mode of communication preferred by UWC students was texting rather than calling. Instant messaging (IM) was an integral part of their lives. According to Rowlands et al (2008, p. 295) it is difficult to see if Generation Y prefers texting, IM being a fundamental trend. It might be the low costs of IM as compared to voice calls.
- Because Generation Ys have short attention spans (Aplin 2013, p. 4), they like to parallel process and multi-task (Prensky, 2001, 2) and will very often use different digital tools surrounding them simultaneously (Shih & Allen, 2007, p. 91). The UWC students who have taken part in the study acknowledged that they engaged

in other activities (e.g. surfing the Internet, playing video games, sending instant messages and chatting with friends) while attending lectures.

On the second phase of the study, the researcher conducted interviews with seven students. As a small sample of UWC students were interviewed, no generalizations can be made but from the responses it can be concluded that UWC students exhibited enough characteristics to be part of Generation Y.

6.2.2 What are the everyday and academic information needs of Generation Y students at UWC?

Individual information needs vary and will motivate individuals to search for information. What was gathered from the interviews was that since they were still pursuing degrees, the students' information needs were based on their academic work. According to Given (2002, p. 20) and Wilson (1999, p. 249), information needs arise when people want to perform tasks or are faced with challenges. In the case of students, assignments and other academic work will create information needs, often prior to setting foot on campus.

From the findings it was clear that, although they could not put a finger on what their needs were, the information needs of UWC students hinged mostly on academic work. Some general needs developed depending on their everyday experiences. The needs may arise any time depending on what they were doing and where they were. The information needs can be summarized as needs for new information, needs to expound already held information and information to confirm what they already know.

Sometimes the students' information needs were to fulfil curiosity. For example one of the interviewee said, *"This other time I was at the coffee shop [around campus] I ear dropped on other students talking about an email sent on the university email on an incident that happened on campus. Out of curiosity, I rushed to check on my emails then I read about the story too."*

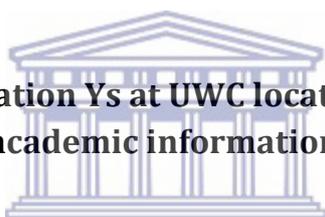
Some respondents indicated that they visited websites not because they had information needs but because they saw an eye catching heading and then clicked

on the link to read more. They would find information by chance and would often share it with friends.

The results from this study correlate with those of research by Shenton & Dixon (2004, p. 179) who revealed that information needs of Generation Y students were need for advice, spontaneous information based on life responses to emerging problems and curiosities, school related information, interest driven information, re-interpretation of information already known and confirming or denying existing beliefs.

Findings also correlate with Chowdhury and Chowdhury (2011: 27) who indicated that information needs can be aligned with Maslow's theory of needs. These information needs can be a need for coping, for helping information, for enlightening information, for empowering information and for edifying information.

6.2.3 How do Generation Ys at UWC locate information for their everyday as well as academic information needs?



The study showed that students seek information every day and that at times they were unaware that they were actually seeking information. Location of information included places and sources employed to gain necessary information. Places (information grounds) used will be discussed later in this chapter. The sources used by the students were for academic and non-academic information needs.

The main source of information indicated by UWC students interviewed was the Internet mainly because it answered all questions related to their academic as well as non-academic information needs. Different web based sources used were search engines, movie websites, YouTube, e-mails, academic websites, UWC website, blogs, and social networks. Gardner & Eng (2005, p. 409) obtained similar results in research done on Generation Y students in California where it was revealed that the students were increasingly relying on the Internet and other technology tools for almost all their information needs. Google seemed to be the

source of choice for all the students. This correlates with research carried out by Reih & Hilligoss (2008, p. 61) where the students indicated that Google was the “best place to be”.

According to Aplin (2013, p. 3) as well as Metzger, Flanagin & Zwarun (2003, p. 277), because information is found easier and faster, Generation Ys relied heavily on Internet sources instead of libraries for academic as well as general information. For academic work UWC lecturers are directing students to use printed as well as web based information sources available in the UWC academic library. Still the majority of the UWC Generation Y students were not familiar with the library databases and used the library mainly to access printed sources such as books. According to Lippincott (2010, p. 28), Generation Y students are undisciplined, seek answers to academic work through facile use and over use technology.

Interviewed UWC students revealed that they do not use people like lecturers, librarians and family members as information sources often. One reason therefor was that at times they could not ask their family members about certain things because they were afraid to be judged. For example, one participant said, *“I cannot ask my parents about sex issues but I can ask them about the South African politics”*.

On the other hand, friends were often consulted. This phenomenon connects with findings by Callinan (2004, p. 93) indicating that peers were often used by Generation Y as sources of information.

From the interviews it can be concluded that UWC students spontaneously used any source. The source used would depend on where they were and what information they needed at that particular time and could be newspapers, radio, television, friends, lecturers, social media and many more. This correlated with both the ELIS and Information Grounds theories that information is gained unconsciously. Wilson (1997: 562) described this type of information seeking as passive searching or attention where information acquisition took place without

intentional seeking and relevant information is acquired almost accidentally - for example listening to the radio, watching television or browsing the Internet.

6.2.4 How does the use of technology affect Generation Ys information seeking behaviour?

The tendency of Generation Ys to frequently use the Internet and ICT tools on a daily basis was displayed by UWC students too. Accumulated from the study was that technology played a major role in the creation, manipulating, retrieving and sharing of information. UWC students were fully dependent on the Internet for their everyday life, passive and active information seeking.

The use of technology has affected Generation Ys' information seeking in both positive and negative ways. The positive aspect of the use of technology was that students were able to access any kind of information to satisfy an information need, anywhere at any time. For information on academic work, students were able to access anything they needed through the UWC website using the student portals, e-Teaching and iKamva. Assignments and other academic information were communicated by the use of the university e-mail created for all registered students. When respondents were compelled to use library sources at some point, they made use of the online services offered by the library.

For non-academic information, the use of technology also had a positive effect in the sense that it kept them in touch with the outside world. Different media like radio, television and social media informed them of what was happening in and outside of the country. Reading campus news and using the above mentioned platforms kept them informed about their academic lifestyle and what was going on around campus.

What thrilled the students was that with the use of technology tools all information would be available effortlessly, no scrabbling and searching for sources. One of the interviewee said, "*...the minute I log on my private email account (yahoo) there are eye catching headings on trending news, celebrity gossip, weather and many more. I just click to what I feel like reading at that*

particular time. Like this days I was interested on the Oscar Pistorius case, so even if I missed the news on TV it was easy for me to catch up". Generation Ys want to retrieve information precisely when they want to, delivered on their favourite digital devices where ever they are.

Respondents also indicated that the fact that the use of technology is more private than going to the library was a positive impact. After conducting a search, the search history can be cleared and nobody has been judged on what they were searching for. The students indicated that technology had made their lives easier for all their everyday information needs, from cooking, music, movies, fashion, staying in touch with family and friends, and all information based on their interests.

Technology has negative effects as well, as it could be addictive and cause distractions. Respondents acknowledged that they would use different devices while attending a lecture. This correlated with Shih and Allens (2007, p. 91) findings that the Generation Y students will often go through emails and chatting with friends on social networks while listening to a lecture.

6.2.5 How do Generation Y students at UWC evaluate retrieved information?

Evaluation of information sources is essential to determine accuracy, reliability, authoritativeness, currency and trustworthiness of the source. Because anyone can deposit information on the Internet and not all web sites have explicit editorial review policies that will analyse content and verify factual information, web based sources can potentially be misleading or inaccurate (Metzger, Flanagin & Zwarun, 2003, p. 272).

Although interviewed UWC students preferred web based sources, they acknowledged to not or rarely evaluating retrieved information. Some students indicated awareness of unreliability of web based information, but still used it without verifying. Most of the participants considered web based information to be accurate and would justify and defend it. This is in line with Aplin (2013, p. 3)

who concluded that Generation Ys did not consider Internet information to be unreliable or inaccurate as well as with Agosto (2002, p. 314) who stated that credibility was not a criteria used by students when evaluating information.

A reason for this behaviour might be that Generation Ys easily run out of patience thus they want quick and easily accessible information (Sheesley, 2002, p. 7). During an interview one student said, *“I accept it blindly because I need to accomplish the task at hand”*.

Another reason might be lack of skills on evaluating information. Some respondents indicated that the credibility of Internet sources was based on the number of viewers of the document. According to Rowlands et al (2008, p. 295) the speed of young people’s web search means that little time is spent in evaluating information. It is therefore clear that they can’t be regarded as information literate.

According to Rieh & Hilligoss (2008, p. 53) students will be motivated to use evaluated information sources if marks are allocated to this aspect of assignment writing. Academic achievements and health-related information may lead students to being credibility concerned.

UWC respondents acknowledged that general information or information used for non-academic work was not evaluated. They will share information quickly on social networks or in different gathering places without questioning the trustworthiness and credibility thereof.

6.2.6 What are Generation Y student’s information grounds?

Pettigrew (1999, p. 811) defined information grounds as formal or informal places where people go to and engage in social interactions or specific situations. Information grounds can occur anywhere because they are based on the presence of individuals, where people share everyday information. Information is passed on to others through information exchange.

Respondents spent most of their time at the UWC campus. The information grounds identified were therefore different places like lecture halls, the library, computer laboratories, cafeterias, restaurants and different areas outside and around campus. Many off campus information grounds were identified. Some were malls, churches or homes of relatives.

The library was visited for use of computers and Internet access in the knowledge commons, to charge their digital devices in the library foyer, to study during examination times and to borrow books. Similar findings were presented in a study done by Gardner & Eng (2005). Indicated was that Generation Y students used the library as a place to study. Thirty-six percent of the students used the library to check out books and visited the library to use computers (Gardner & Eng, 2005, p. 408).

From analysing the interviews, it can be concluded that social networks and being connected to the Internet were regarded as the best information ground or 'place to be' for UWC students. Social networks were preferred, because it allowed interaction between many people and kept individuals posted on what was happening in the world. In research by Counts and Fisher (2008, p. 158), almost 80% of the participants frequently used online information grounds such as emails and MySpace.

Social media are part of the Web 2.0 tools. Web 2.0 tools allow users to interact and collaborate with each other. Examples of these tools are social networks, blogs and wikis. By using social media, users are able to exchange ideas and opinions quickly and cheaply. By using different social media, students would gain and share information with friends and family. One interviewee said, *"When I have my phone and my tablet I sit in my room log on to Face book, Skype and WhatsApp. With all that, am in touch with people in different places"*.

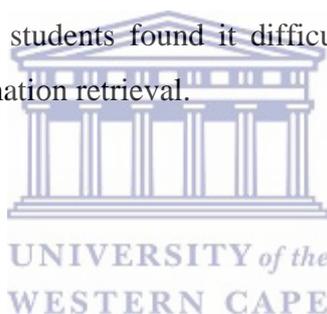
Gathered from this study was that social media assisted students in awareness of social activities, coordinating, learning new things, sharing interests, getting their questions answered, experience diversity of people's ideas and strengthening connection.

6.2.7 What are the barriers faced by Generation Ys in their information seeking?

Challenges encountered by interviewed Generation Y students at UWC were mostly Internet based. Because students' lifestyles were affected when the Internet was down, it became a challenge. Most of the students indicated that accessing the Internet via smart phones when off campus was at times slow or impossible to use. Respondents indicated that there were places on campus with no Wi-Fi connection resulting in no Internet access.

Information overload or information explosion was another challenge faced by UWC Generation Y students. They found selecting relevant sources for academic purposes difficult and retrieving recurring sources frustrating. Although the UWC library subscribes to a large number of data bases and developed a next generation public access catalogue, students found it difficult to use and preferred to use search engines for information retrieval.

6.3 Conclusion



The main purpose of this research was to understand the information seeking behaviour of Generation Y students at the University of the Western Cape. Having completed the project, it is important to reflect and decide if the main questions have been answered. The interest of the researcher was based on the characteristics of the digital natives, the abundance of available information and the information seeking habits of Generation Ys.

Findings indicated that Generation Y students at UWC had been exposed to ICTs at a later stage than Generation Ys in other countries, but adopted new technologies and can be regarded as 'digital immigrants'. The UWC Generation Y students had similar characteristics as those mentioned by Prensky (2001) and different authors around the world. The difference in the studies was their years of birth, exposure to ICTs and access to the Internet when not on campus. The years of birth were slightly different from that of South Africa. As mentioned be

Czerniewicz & Brown (2010, p. 363) exposure and experience to ICTs was an important factor to consider when identifying Generation Y of South Africa.

Not all South African Generation Ys were exposed to ICTs since birth, thus this cannot also be generalised. Most of Generation Ys in South Africans were exposed to digital tools at a later stage and accessed the Internet via smart phones through broadband wiring. UWC students who have taken part in this research were compared to first world countries despite being ‘disadvantaged’, nevertheless they are able to make use of what they had and demonstrated the Generation Ys life style.

UWC Generation Y students displayed most of the digital natives’ habits. Rowlands et al (2008, p. 301) say “we are all Google generation now, the demographics of Internet and media consumption rapidly eroding this presumed generational difference. Generation Y may have been the earliest adopters but now even the older generation is catching up”.

Reflected in the study was that most information was gained unconsciously, at informal places when participants were pursuing their interests or relaxing. This correlates with both theories used as theoretical frameworks for the study. Although retrieved information was never verified for trustworthiness and accuracy, it was shared with friends using social networking tools. It can therefore be concluded that UWC Generation Y students reflected a lot of negligence in terms of evaluating information sources. Emphasis was rather on the availability of quick and easily gained information.

Lecturers played a major role in the information seeking regarding academic work of digital natives. Most of the information sources used for the academic information needs were stipulated by lecturers and at times they would be compelled to use the library. Students tend to evaluate information sources only when it was required or when marks were allocated for academic work.

The study gathered that the main information ground used was the Internet. The students spent most of their time on the Internet interacting with people in different parts of the world. A lot of information sharing or exchange was done

online using Web 2.0 tools. Although students used other information grounds like lecture halls, malls, restaurants and areas outside campus, they would still be constantly connected to the Internet while they were there. Generation Ys socialized differently from the previous generations. According to the interviewed Generation Y students at UWC, life would have been even better if tutorials were done online in the comfort of their homes.

The University of the Western Cape has made an effort to cater for this generation by employing new technologies and services. Interviewed students made use of “Free4all” Wi-Fi, computer laboratories with Internet access on campus and in residential areas, e-Teaching, university emails, iKamva and the library services.

6.4 Recommendations

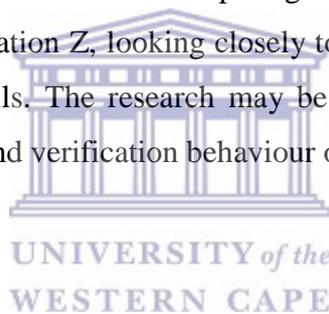
As indicated in the first chapter of this research, the findings of the study might contribute to future development of services offered at UWC. Therefore based on the findings of the study, the following are the recommendations suggested:

- The UWC library and lecturers need to collaborate in order to develop new strategies to educate and empower students on skills to search and evaluate information especially found on the Internet. It appears that students intend to continue to rely on the Internet in the future.
- Libraries need to look at what makes Generation Ys turn to search engines (specifically Google), and try to replicate some of those features. Findings of the study and other studies indicate that students prefer Google for all their information needs.
- The university may also involve students in designing the library website. The reason being that the university subscribes to a variety of data bases that the students have indicated not to frequently use, whereas they are the best for their academic work.
- It is essential to provide the university staff especially lecturers and librarians training on understanding the type of students they are having on campus. Different researchers have identified their learning styles and information

behaviour. This is based on the fact that Generation Y is different from the previous generations as defined by their characteristics.

- The university may also explore mobile services that can be used to provide information needed by Generation Y. Indicated in the study and other research, the majority of the students own smart phones and are constantly connected. These mobile services may be convenient for the students to access information in different information grounds.
- The university may provide more links of Web sites to be downloaded by students on the computers or Tablets on external sites that would assist students on evaluating Web sites and information on the Web. This has been incorporated by the Cape Peninsula University of Technology (CPUT) in their information literacy training programme.

Lastly, for future research it could be comparing information seeking behaviour of Generation Y and Generation Z, looking closely to Web based sources, searching and their evaluating skills. The research may be on Internet use, perception of information credibility and verification behaviour of Generation Y and Z.



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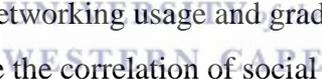
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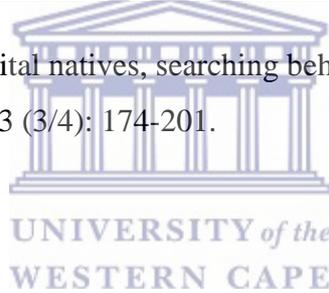
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APPENDIX A

FACULTY OF ARTS

Department of Library & Information Science

Dear participant,

I am conducting a study on the Information behaviour of Generation Y students at the University of the Western Cape. The objective of this study is to determine information needs, information resource usage and the evaluation of retrieved information.

Your assistance will be highly appreciated.

If you agree to voluntarily take part in the above research, please, tick below:

- I confirm that I have read and understood the information in the sheet and agree to take part in this research.
- I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.
- I understand my participation is voluntary and I am free to withdraw at any time without giving any reason and that I do not have to answer every question.

Signature.....Date: /...../...../2014.



UNIVERSITY of the
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APPENDIX B: Questionnaire

Student Number:

1. Age:

- a) 18 – 22 []
- b) 23 – 26 []
- c) 27 – 30 []
- d) 31 – 34 []

2. At what age were you exposed to the use of Internet and information communication technology (ICTs)?

.....

3. For how long have you been using ICT tools?.....

4. Do you own the following (please tick):

- Lap top []
- Note pad/ Tablet []
- Smart phone []
- Mp3 player []
- Head /ear phones []
- PC []



5. Do you use a computer off campus? a) Yes []
b) No []

6. Where else do you have access to a computer other than on campus?

- Work []
- Where I live []
- Friend's place []
- Public library []
- Community hall []

7. Do you have access to internet off campus? a) Yes []
b) No []

8. How do you access Internet (you may tick more than one item):

- Home []
- Smart phone []
- Library []
- Internet café []
- Computer Labs []

9. What type of connection do you use when connecting to Internet off campus?

- Dial-up
- Cell phone
- Wireless

Other (please specify).....

10. How often do you do the following?

- | | | | | |
|------------|--------|-------------|--------|----------|
| Throughout | Once a | At least | Once a | Other |
| the day | day | Twice/trice | week | (Please |
| | | a day | | Specify) |

Browse the Internet

Work on a Spreadsheet

Work on a slide presentation

Working on Word processing

Watch a video online

Listen to music online

Play games online

Read on an
entertainment/news related
website

Upload digital images on
social networks



11. Do you have social networking account(s)?

a) Yes

b) No

APPENDIX C: Interview Guide

Ice breaker: -What course are you doing?

Information Needs: -What are your everyday information needs (academic, general)?

INFORMATION SEEKING

Leisure:- when having information needs where do you start (friend, parents, relatives, internet)

-what are your places of interests that you go to?

-which places do you find information related to your information needs?

-what are your preferred sources of information eg magazines, internet, newspaper, friends, radio, books, social networks etc.

Academic: -which places do you find information related to your academic need (Formal or informal places,)

-which sources do you prefer (printed, internet, library database)

-when assigned task do you prefer working alone or in a group?

-how often do you use the library?

-which places in the library do u prefer to use and why (foyer, computer room, etc)

-do u use the library database (how often)?

Trustworthiness of information sources

-how do you verify the reliability of the information sources you use and the information gathered from the different places.

-how do you keep yourself up to date? (Discuss with friend, from different social networks, the Internet, printed sources, different places that you hang out).

UWC: - does the UWC environment influence your use of internet and ICTs, in what way?

-how can you rate the access of the internet around campus: highly accessible, accessible slightly accessible or inaccessible.

Challenges:- what challenges do you encounter during information seeking?

-when experiencing problems or difficulties during your information searching, who do you turn to first?

Closing: -Overall, does technology have any kind of impact during information seeking (positive or negative impact) please explain your answer.

Do you fully depend on the Internet for your everyday information seeking?



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APPENDIX D

FACULTY OF ARTS

Department of Library & Information Science

Dear Student

21 May 2014

Request for interview

I am Sanele S. Dlamini [student # 3371152] and am currently busy with my mini thesis for the Master Library and Information Studies. For my mini thesis Dr Lizette King is my supervisor and I am investigating the Information behaviour of Generation Y students at UWC.

As part of the 1st phase of the study, you have recently completed a questionnaire on Generation Ys. It gives me great pleasure to inform you that you qualified as a Generation Y student and that I would like to invite you to the follow-up interview. The interview will not take up too much of your time, will be conducted between 26 May and 30 June 2014 and will take place in the Department of Library and Information Science. Please be assured that you will stay anonymous and that no person information will be recorded.

If you are willing to be interviewed, please indicate via e-mail to sanelumusa@gmail.com what date and time will suit you.

Please feel free to contact me on my cell phone 0736543970 if you need additional information.

Thank you for your willingness to assist in this research.

Kind regards

Sanele S. Dlamini



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A place of quality, a place to grow, from hope to action through knowledge

APPENDIX E: Interview Transcripts

Interview No.1

Sanele: What course are you doing?

Interviewee: Bsc 2nd yr. It's about physics, electricity, x-rays, nuclear science

Sanele: What are your everyday information needs?

Interviewee: Mostly based on my course, research , General: socializing on Facebook, celebrity lifestyle (Born again), inspirational, sermons, church, local sopies (Generation) , fashion and news making headlines(like Oscar Pistorious case), sports sometimes.

Sanele: On general information needs where do you first start searching?

Interviewee: my phone and laptop for internet. Friends sometimes

Sanele: What are your places of interest?

Interviewee: computer lab, home in front of the television or bed room, café, church. I don't like crowded places. Library

Sanele: When at the café you usually with friends

Interviewee: Yes sometimes alone

Sanele: What are your preferred sources of information?

Interviewee: Internet, books I love reading, friends and advertisements play a major role on providing information (if not advertised I don't take note of that), radio (107 and 104), news on radio not on TV

Sanele: Academic- where do you get information that addresses your information needs?

Interviewee: Lecture hall, internet and library (level 14).

Sanele: Which sources of information do you prefer, is it printed sources or internet?

Interviewee: lectures and friends as well, based on what we doing in class

Sanele: Do you prefer working alone or in a group?

Interviewee: Alone, last year I was doing it with my friends. I don't have friends in this class. If I get stuck then I ask my friends for help

Sanele: Do you use the library databases?

Interviewee: No, I don't even know them. I remember them when they took us for library tutorials. I just know how to search for a book, past exam papers and the journal articles. I use them when I have an assignment not often because our course deals mostly with practical. We only give an assignment once

Sanele: Which search engine do you mostly use?

Interviewee: Google

Sanele: How often do you go to the library?

Interviewee: I like using the library when studying. Level 11, I use the study carrels because I want to be alone. I like a quiet place because it encourages you to read, and I love reading. Level 14 as well

Sanele: How do you verify the reliability of the information sources that you use?

Interviewee: I don't know but the Librarian during the tutorials taught us how to do it and referencing and turn-it-in. I don't like this turn-it-in thing because with us in physics it doesn't work for use. These formulas that we use are peoples' ideas so it picks it up that you plagiarising, you cannot change it.

Sanele: How do you tell that this information I have gained is trustworthy

Interviewee: I don't want to lie, I have considered that. I just relate it to what I know and what the lecturer told me

Sanele: How do you keep up to date with your everyday life information?

Interviewee: Reading all the time, going back to lectures and friends as well

Sanele: Does the UWC environment influence your use of internet and ICTs,

Interviewee: It does at some point negatively. Some students tend to forget that they are here for learning not to socialize on Facebook. On the other hand positively because of free Wi-Fi, one can download your PDF and read anywhere.

Sanele: Please rate the access of the Internet around campus

Interviewee: Highly accessible

Sanele: What challenges do you face during information seeking?

Interviewee: when I don't get what i am looking for

Sanele: When experiencing these problems, who do you turn to first?

Interviewee: If I am at the library I go to the person there by the counter, or I send an email to my lecturer for assistance.

Sanele: Does technology have any kind of impact in your information seeking (positive or negative)

Interviewee: Positive impact because when you using your ICT tool like my phone my concentration is high. I read where ever I may be even when am in the kitchen , its portable.

Sanele: Does this mean you depend a lot on internet for your everyday information

Interviewee: Off course yes. You have to enjoy that source of information for example my phone is pink it makes me to enjoy reading from it. I go to the library because its comfortable.

Interview No.2

Sanele: What course are you doing at UWC?

Interviewee: Am doing my Ba degree in phycology, 2nd year student. It includes adult development, child development, therapy treatment and French.

Sanele: What are your everyday information need, what do you need information for?

Interviewee: Basically for course theories on psychology and back ground. Music, new movies, news online specially because I don't buy newspapers. Like now news on voting, and Oscars' trial and what is happening in SA. TV series and sometimes food.

Sanele: Where do you start searching for news related to your general information needs?

Interviewee: For the news I go to News 24, with the Oscar trial they gave a link for watching the trial. Movie I check on the movie website IMDB where they rate and description of the move. For music I use You Tube. Friends sometimes if they have something new that I don't know, then I check it.

Sanele: What are you places of interest that you usually go to?

Interviewee: (laughing) Most of my time am at the library. Food lovers market in Cape Town, waterfront for tea

Sanele: When hanging out with your friends in those places what information do you gain (what do you talk about)?

Interviewee: We have different backgrounds so we always have something interesting to share and try. Music , tea(different kinds and how to make them), sushi, tea cups. She lived in England and South Korea and I have been to Germany and America. Experiences of the world

Sanele: What are your preferred sources of information?

Interviewee: I read newspapers when am home because they buy them. I prefer the newspaper for new, radio is always on (CC FM and Good hope). Assist for traffic updates (not that I drive) and news making headlines at that time. Read books for fun. Social media too I use it for fun and communicating with friends and family (cousin). I don't go to social media for checking out for information. It just happens spontaneously. Go to twitter, Facebook and emails

Sanele: How do you keep up to date with information?

Interviewee: check the Internet, Facebook page sometimes has links then I click there (like the one of Beyonce and JeyZ) or maybe someone has posted a link that is off interest to me.

Sanele: Which places do you find information related to your academic needs?

Interviewee: Google scholar, academic website, books

Sanele: Which sources do you prefer most for your academic work?

Interviewee: Text books, they are the ones which have the most information. For extra information then I use the Internet.

Sanele: Do you prefer working alone or in a group?

Interviewee: Alone, groups are not good. I had a bad experience beginning of year when we were given an assignment as a group. It wasn't a good experience.

Sanele: How often do you use the library?

Interviewee: Every day when am on campus. Mostly level 6 (knowledge common), level 11 or level 14.

Sanele: How do you verify the information sources that you use?

Interviewee: Check for the authors, really I don't check

Sanele: How do you keep yourself up to date with information?

Interviewee: Speak to friends and check my social networks

Sanele: Does the UWC environment influences your use of internet and ICTs (good or bad influence)?

Interviewee: Wi-Fi has so much positive influence when you on campus. One is able to download any files whenever there is a need. One is able to download even notes

Sanele: Please rate the access of the Internet

Interviewee: highly accessible

Sanele: Do you face challenges during your information seeking?

Interviewee: It depends on what am looking for.

Sanele: Who is the first person you turn to when having those problems?

Interviewee: Wooo my friends. Then I ask how they can assist.

Sanele: Does technology have any kind of influence or impact during your information seeking (positive or negative)?

Interviewee: It has a positive impact, but the issue is one must check the trustworthiness of the information. If one doesn't check he/she might get in trouble. Technology helps because you can download all that you need on the phone. You can access anything so easy

Sanele: Do you fully depend on internet for your everyday information seeking?

Interviewee: Not fully dependent but it plays a major role (let's say 70%).

Interview No. 3

Sanele: What are you studying at UWC?

Interviewee: 2nd year Ba psychology. I do linguistics and sociology.

Sanele: What are your everyday information needs?

Interviewee: music, celebrity lifestyle, academics (very important), emerging technology, fashion and style. Things that influence the society, ICT gadgets.

Sanele: Where do you get information that addresses your information needs?

Interviewee: For information on the gadgets and technology I get it from my boyfriend. He works at a technology department (TFG). He comes with the tech magazine. First it was boring now I have gained interest because I can now tell the difference between the gadgets (e.g. Samsung galaxy S4 and S5, iPhone 4 or 5).

Internet because I don't watch television often since am not home; YouTube for music, Online groceries for sales or specials;

Sanele: Where do you start searching for your information?

Interviewee: Internet. It sometimes happens unplanned when I check my email. I have a Yahoo account so when I go to that page you find topics then you click and read more about it. At times I ask my boyfriend.

Sanele: Which places do you mostly hang out at?

Interviewee: Most of my time I am at the library, but our spot used to be the cricket field (It's a lovely place)

Sanele: What are your preferred sourced of information?

Interviewee: Magazines, Internet, friends, radio for weather and News (Good hope), Twitter (celebrity news) and Facebook (not that much but I read people's status)

Sanele: Where do you find information related to your academic information needs?

Interviewee: UWC portal, eTeachings, UWC website for checking on books at the library and Google scholar

Sanele: Which sources do you prefer (printed or internet, library database)

Interviewee: It all depends on what I am looking for. Lets say for sociology and psychology it's the Internet, text books and prescribed readings by lecturers. For linguistics it is the hand-outs from the lecture because they say that's it and its correct.

Sanele: When assigned tusk do you prefer working alone or as a group?

Interviewee: Alone

Sanele: How often do you use the library?

Interviewee: All the time when am on campus

Sanele: Are you aware of the library databases?

Interviewee: Yes, I use it for my assignments and just to check what the lecturer was talking about

Sanele: How do you verify the reliability of the information sources, the trustworthiness of the source?

Interviewee: I check how many people have used it, ask friends if they have used it. Sometimes I double check with my lecturer if it is okay to use it.

Sanele: How do you keep up to date with information?

Interviewee: Check on twitter, Facebook,

Sanele: Does UWC has influence on the use of internet and ICTS?

Interviewee: It has positive influence because it shows that UWC is efficient in making sure that every one has instant access to information. For the fact that one is able to get information while at home through eTeachings and the university e-mail. It makes you lazy as well to come to campus

Sanele: How can you rate the access of internet at UWC?

Interviewee: Highly accessible

Sanele: Do you encounter any challenges during information seeking?

Interviewee: sometimes, like when the internet is down. This other day I need my notes on eTeaching but could not download. I guess the Internet is my everything so if it's down am stuck.

Sanele: Does technology has a positive or negative impact during your information seeking?

Interviewee: Positive impact information is easy to access. Makes life easier, you communicate with family (Skype). What ever information you need like you want to cook something You Tube is there to take you through all the steps.

Sanele: Do you fully depend on the Internet for your everyday information seeking?

Interviewee: Yaaa pretty much (laughing), if not I ask my friends. Parents for staff related to national news.

Interview No. 4

Sanele: What course are you doing?

Interviewee: 2nd year Blis library and information science and Afrikaans and English. I see myself working with kid.

Sanele: Please tell me about your everyday information needs?

Interviewee: I need information just to make basic decisions, academic because I study. Social, weather predictions, news, sometimes fashion. They are mostly

based on the day and new things that I encounter. Fashion because my friend is into it.

Sanele: When having information need, where do you start your search?

Interviewee: Ninegag (internet), sometimes my dad for news, discuss with my grandfather on politics like comparing the old times of South Africa and now. I use Google for almost every information need. I can't ask my parents about other stuff (sex issues), so YouTube is the answer to such information needs.

Sanele: What are your places of interest?

Interviewee: Home, campus. Me and my friend actually started naming the different lawn areas around campus (condom square, judgement avenue, Muslim square). Off campus, friends' place (every second /third Friday), Sea point restaurants. Parow Mall.

Sanele: When hanging out what information do you gather?

Interviewee: We talk about guys and latest fashion in clothing shops. We like Mr Price clothing shop.

Sanele: What are your preferred sources of information on your social life (magazines, friends, etc)?

Interviewee: I hardly use magazines but I do read People Magazine, the Internet is my preferred source. YouTube on how to do some stuff (face must), Wikipedia, Facebook and ninegag.

Sanele: Which social network do you usually use?

Interviewee: Mostly it's Facebook then WhatsApp. I used to have an account on Pinterest but not anymore.

Sanele: What sort of information do you gain in the social networks?

Interviewee: Usually what is happening in people's lives, lift club (transports).

Sanele: How do you keep up to date with your everyday information needs?

Interviewee: It all depends on what kind of information, for my academic it's the university email (although I don't like it, I would prefer the lectures to use WhatsApp because it's quick), eCanvas and eTeaching.

Sanele: Which places do you use for information related to your academic work?

Interviewee: I go to the internet first because sometimes they have books on PDF so I download. Like Afrikaans on the Kalahari .net sight. I sometimes use books for English essays so I go to the library.

Sanele: Which information sources which ones do you prefer printed, internet or library data bases?

Interviewee: Internet and electronic sources because you can copy and paste.

Sanele: Do you use library databases?

Interviewee: Yes I do but not very often. Its because we have to as part of information science course, we are forced but I use it too for personal staff as well its handy.

Sanele: When assigned task in your academics, do you prefer working alone or in a group?

Interviewee: Alone, communication is sometimes a problem.

Sanele: How often do you use the university library?

Interviewee: Once every two weeks. I don't use it very often because I can access the databases at home. Well I do go there to charge my cell phone or laptop.

Sanele: When visiting the library, which places do you usually use, foyer, iPad room, computer room, etc?

Interviewee: Foyer, when I need books I go to level 8. When its quite, because there certain times when the library, I go to level 8 next to the window and have a nice view of the campus (over Muslim square). When I want to think of something or unwind since there will be less people moving around and that place is hidden by a corner.

Sanele: How do you conduct your search online?

Interviewee: I use key words, I don't use the quick search. I define my search specific for my information need otherwise I might end up with 300 books that I might not need. I choose books that are relevant on what I am looking for.

Sanele: How do you search for library data bases?

Interviewee: I use the university website and use the A-Z search. If I know the title I use that one but if I don't, I use key words and topic related.

Sanele: How do you verify the reliability of the information you use during your information gathering?

Interviewee: I always say double check. If its from a friend I go to Google to double check or conform. When it comes to Wikipedia (I love Wikipedia), I click on the footnotes links. They take me to the original source. With Afrikaans you sometimes find limited sources. When you check the links you might find that 2/3 of them have a broken links. Making it hard to conform that its reliable.

Sanele: How often do you check the reliability of the source?

Interviewee: I usually do this for my academic work. It depends on the marks of the assignment. If it is an important assignment let say it's a research assignment. But if its Afrikaans they are really not serious on what sources did you use.

Sanele: When doing your academic work, do you usually discuss with your friends sometimes?

Interviewee: Yes, I listen to my friends on what they think about the topic.

Sanele: Do you keep yourself up to date on your academic information needs?

Interviewee: No, I just go there when there is something I need. I just have so much to do. Sometimes, lets say once in a while I go to ecava to get new assignment or study notes that I need.

Sanele: Does the environment of UWC have influence on the use Internet and ICTs?

Interviewee: On the academic it's a good influence because they encourage the get most of the things electronically, stay in touch with lecturers and all. What is happening now is we don't have Wi-Fi all around campus, internet access is slow due to overload. People use it for Facebook then making it very very slow. Also we don't have cell phone reception in most parts of campus, you cannot WhatsApp and phone. That is very frustrating.

Sanele: How can you rate the access of internet in campus?

Interviewee: Out of ten I would give it three and a half. Because if you want internet, you should be at the cafeteria if you lucky or less people there. You cant access internet if you far from the building.

Sanele: Do you usually share information with friends, relatives, etc.?

Interviewee: Yes, through face book with my mum or grandfather. Let's say there is an article that I would like the read, I share it with them. I email

Sanele: Do you encounter challenges during your information seeking?

Interviewee: Yes, especially when looking for academic information. There is such variety of sites you can use. You have to analyse whether they are trustworthy or not. It becomes frustrating which source to use(Google Provide so many relevant articles). When you have to redefine your search.

Sanele: Which search engine do you prefer using?

Interviewee: Google, I used to use Google chrome.

Sanele: When experiencing challenges during information seeking, who do first turn to for help?

Interviewee: It depends on what kind of information am looking for. For example, when something to do with my car I go to Google and I have a friend who is a mechanic (or a person that I trust). Academic I go to my friend first then the lecture. Friends are better because of the personal relationship I have with, whereas with lecturers you often feel insecure. You don't want to bother them and maybe they will think you stupid you cant do this.

Sanele: Does technology have any kind of impact during your information seeking?

Interviewee: “Positive positive positive”, when you looking for information you do not want everyone to know. For example on sex education (BJ), my parent never taught me anything about that. When you want to know what something is you don't have courage to go to your mum and ask her. She wouldn't know half the staff or pretend she doesn't know it. So most of the time I google it and clear your search history after that. Its very much about your privacy. People shouldn't judge you about what information you access. It can be also be occurred to ask the librarian on sex education book. The librarian will know what you reading and it would be weird. They will check you over the rim of the glasses and say whaaaat? Fifty shades of grey porn literature.

Sanele: Do you fully depend on internet for your everyday information seeking?

Interviewee: yes definitely, between 75 and 80 percent. A lot of my life revolves around social media, research and internet. If you don't communicate with people you get out of what's happening and you miss things.

Interview No. 5

Sanele: What course are you doing at UWC?

Interviewee: 2nd year on Bcom accounting

Sanele: What are your everyday information needs?

Interviewee: Basically I can't leave without Internet, Am not talking about social media but as a resource to gain information.

At the moment its for my book Business systems. I need information based on economics, accounting and information systems. This is my leisure. I enjoy ruby and soccer but at the moment I don't have time for that. These are detractions at the moment since am focusing on my goal my passion. Once I start something there is a purpose. I rather work than party.

Sanele: When you have an information need where do you go?

Interviewee: The Internet, reason being its quick no frustration and I haven't been trained on how to use the library properly. When I go to the library it feels like am wasting minutes, like for example when I click on the Internet its 5 or 6 seconds u there.

At times we share ideas with friends; well they are not necessary friends but business associates. Great people share ideas.

Sanele: What are your places of interests (leisure)?

Interviewee: City ICC business conferences, I used to go to London. At the moment the place of interest for me honestly it's the Internet because, its online. You can get a degree now online its easy in the best universities.

I love stall bars unfortunately they don't have it here they have nice coffee.

Sanele: What are your preferred sources of information?

Interviewee: It depends, I do read a lot of book. If that particular information need am passionate about, I check some staff on the Internet and look for books as well. Books are much better to look at as compared to reading on screen.

Sanele: Do you have any social networking accounts?

Interviewee: Yes, pretty much all of them. I use Pinterest daily for business for affiliated marketing. Linktin is the best these days.

Sanele: Where do you get information based on your academic work?

Interviewee: Required books that we need to buy. It depends on the course, if it the major I buy but if it is an introduction course I copy the slides on eTeaching. Everything is Internet once again, it runs my life.

Sanele: Which sources of information do you prefer?

Interviewee: This is going to sound terrible, the Internet. YouTube and iTunes, the reason being even if I miss a lecture (Stanford University professor) you can watch the video online why not. On YouTube there is a group called The Blog brothers they brilliant and there is a crush course.

Sanele: How often do you use the library?

Interviewee: Half the time when I use the library Its for the Internet. I have used the library nine times since here

Sanele: Which places in the library do you use?

Interviewee: I go for the prescribed books then I leave, but I sometimes go to the computer room for internet.

Sanele: When assigned task, do you prefer working alone or in a group?

Interviewee: That a tough question. It depends on the task and the team.

Sanele: When you conduct search how do you conduct it?

Interviewee: I start on Google, it's the best source of information.

Sanele: When you do your search do you put the whole sentence or key words?

Interviewee: Keywords because when you put a full sentence a blog will pop up. For academic you must go to Google scholar.

Sanele: Do you use library databases?

Interviewee: Yes, only because we were introduced to. I feel Google is a strong competitor for library databases. They are offering a lot of services.

Sanele: How do you verify the reliability of the information source you use?

Interviewee: Sometimes I accept it blindly (laughing). If it's a newspaper I don't trust. I read online magazines. I only do that on assignments.

Sanele: How do you keep up to date with information?

Interviewee: I watch news during the day not at night. I basically us online media. I read blogs, become part of that community.

Sanele: How do you share information?

Interviewee: In person, email and social media. When you see something interesting and that helps you have that thing of sharing but obviously you don't want to share with people who don't want to. Have the right group of people.

Sanele: Does the UWC environment influences your use of internet and ICTs?

Interviewee: I was leaving in England before I came here so I have been on internet all the time.

Sanele: How can you rate the access of internet around campus?

Interviewee: It is accessible but slow, it sucks.

Sanele: What challenges do you encounter during your information seeking?

Interviewee: Everything is easy and thanks to Internet. I guess the only challenge is finding repeatable sources.

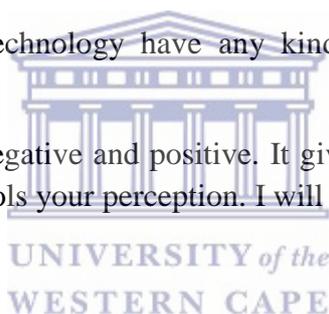
I start at Google so no challenges or problems

Sanele: With your academic work, who do you turn to?

Interviewee: Three things text books, lecturers and lecturer's slides and internet. Internet is there, if am real..... real stuck my colleague.

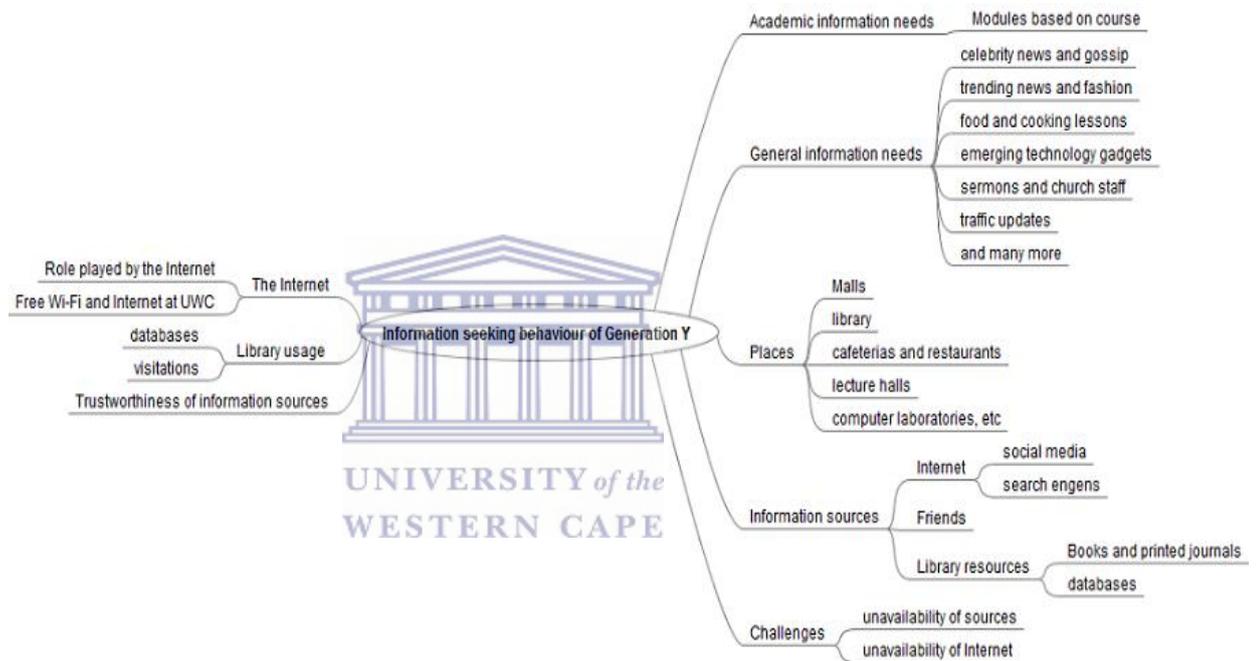
Sanele: Overall, does technology have any kind of impact in your everyday information seeking?

Interviewee: It is both negative and positive. It gives ready available information to me. Information controls your perception. I will be lost without the Internet.



Appendix F: Themes

The following themes were identified during the thematic analysis of information gathered from the interviews. Figure 14 shows the mind map used to assist in extracting and organizing information. By identifying the themes, it was easier for the researcher to understand information seeking of Generation Y students at the UWC campus.



Academic information needs

Academic information needs indicated by participants were basically based on the different modules they were doing as registered students at UWC. The students interviewed were from different faculties such as Bcom accounting, Library and information sciences, BSC physical sciences and BA in psychology. Thus, their academic needs depended on the courses they were enrolled in.

General information needs

Daily information needs of participants included both academic and general or leisure based information needs. General information needs identified by participants included music, movies, fashion, technology gadgets, local and international celebrity news or gossip, weather, politics, food, sports, health and general things.

Places

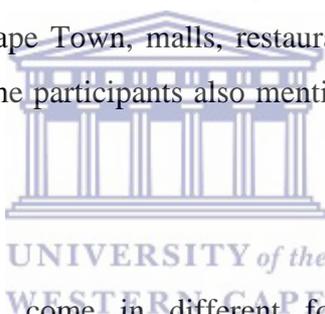
Places where information was exchanged included formal and informal ones as stated by the Pettigrew's Information grounds theory and ELIS model that were engaged in this study. In these theories, it is stated that information may be gained anywhere as long as there is interaction of people. Participants usually visited places such as lecture halls, the library, computer laboratories, cafeterias, church, food lovers market in Cape Town, malls, restaurants, cricket field and different lawns around campus. The participants also mentioned home as one of their best places to be at.

Information sources

Sources of information come in different formats such as print, audio, electronically (web based) or people. Respondents used different sources of information for different information needs. For their academic work, students indicated to use information sources stipulated by lecturers, the Internet and library resources. For general information, participants indicated the use of the Internet, social media as well as friends. Participants indicated to use different types of web based sources such as search engines, library databases and social networking tools. Although Generation Ys are known to prefer working in groups, these participants preferred working alone when assigned task.

Usage of the library

Participants rarely physically visited (going into the library building) the library. If they go to the library, participants will be at level 8, level 11, level 14, the



Knowledge commons and the foyer. Some participants indicated that they were not familiar with the library databases and most of them did not use them.

Trustworthiness

Participants only occasionally or never verified the trustworthiness of information sources they used. They occasionally verified the sources when doing their academic work because this contributed in their academic work (marks).

Challenges

The participants indicated that they faced challenges during information seeking. Most of the challenges encountered were during searching for academic information. The challenges were information overload and finding the same sources repeatedly. Other challenge indicated was no or slow Internet connection.

The Internet: Role played by the Internet

Participants indicated that they fully dependent on the Internet for their everyday information seeking and that it played a major role in their daily activities. The Internet was mentioned to be a provider for all their information needs. Internet based sources were used for both anticipated and unexpected information. This was because they would use the Internet with the intention of searching for anticipated information, for example information needed for assignments. Again when browsing the Internet with no intention of searching specific information like when going through their emails there would be interesting links to click on to read.

Wi-Fi and the Internet at UWC

When looking at the role played by the UWC environment among the students in the use of ICTs and Internet, the participants experienced the environment as both positive and negative. The fact that there was free Internet access at UWC had a positive influence on the students because it was convenient to access any kind of information based on their everyday information needs at any time. Negative influence related to the fact that it could distract students' attention from academic

work. Students needed to be disciplined not to spend time on non-academic activities and be distracted from lectures while chatting and messages. Generation Y has the ability to multi task. They would be using a number of ICTs at the same time while listening to the lecturer. One of the characteristics of this generation is that they easily get bored or run out of patience. Thus in the availability of Internet and technology gadgets, it is easy for them to be distracted.

