



**University of Fort Hare**  
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**Students' intentions and attitudes towards using Information and  
Communication Technology (ICT) for the purpose of counselling.**

**By**

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## Declaration

I, Zikhona Dlaza, student number: 201704716 hereby declare that this thesis entitled, “Students’ intentions and attitudes towards using Information and Communication Technology for the purpose of counselling”, is my own work and all the sources that I have used have been indicated and acknowledged by means of complete references. Ethical clearance to conduct this research has been obtained from the University Research Ethics Committee. I have followed the University’s policy on plagiarism and taken every precaution to comply with the regulations.

### Signature



**Date: 10/06/2019**



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## Abstract

Information Communication Technology (ICT) is becoming popular especially within a university campus setting not only as a learning tool but also for the purpose of communication. Internationally there is an acknowledgement of the popularity of ICT in delivering mental health services. This study is built on that premise which indicates that ICT could serve as a viable tool for counselling interventions within a university setting. However, limited research has been done in this area and conflicting results have been reported especially related to gender. This study therefore aimed at exploring the intentions and attitudes of male and female students towards using ICT for counselling at a South African university. A quantitative research approach was employed to collect and analyze data. Data was collected amongst students using self-administered questionnaires with a sample of 266 ( $N = 266$ ) respondents. Descriptive and inferential statistics were employed. The main findings of the study indicate that students have an intention to seek psychological help through the use of ICT counselling, which consequently positively influenced attitudes towards the utilization of ICT counselling. Results further indicate that gender and age differences amongst university students is significantly related to the intention to use ICT counselling. The information generated from this study has contributed to the limited body of literature on ICT in counselling psychology, more specifically in a university setting in South Africa. Overall, it encourages critical reflection on modern psychological practice to meet student's needs.

**Keywords:** Online counselling; Internet, Information Communication Technology (ICT) for counselling, Psychological Counselling, Student Counselling, Intentions, Attitudes.

## List of abbreviations and acronyms

**ATSPPHS:** Attitude toward Seeking Professional Psychological Help Scale

**DCCD:** Directorate: Counselling and Career Development

**HPCSA:** Health Professions Council of South Africa

**ICT:** Information and Communication Technology

**OCAS:** Online Counselling Attitude Scale

**OC-V:** Value of Online Counselling

**OC- D:** Discomfort of Online Counselling

**SCSC:** Student Counselling Services Center

**TAM:** Technology Acceptance Model

**TPB:** Theory of Planned Behaviour

**UNISA:** University of South Africa



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## Dedication

***“The world is round and the place which may seem like the end may also be the only beginning”*** Ivy Baker Priest

I dedicate this research to everyone who has gone through the worst but never gave up. Every little victory counts!



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# Chapter One

## Introduction

### 1.1. Chapter Preview

The present study focuses on the use of Information Communication Technology (ICT) for the purpose of counselling. ICTs are information handling tools that are used to produce, store, and process, distribute and exchange information (Yushau, 2006). Several studies have highlighted that ICT can have the capability to serve diverse populations, ultimately yielding multifaceted implications for counselling, counsellors, and clients (de la Varre, Keane, & Irvin, 2011; Dincyurek & Uygurer, 2012; Glasheen, Campbell, & Shochet, 2016; King Bambling, Lloyd, Gomurra et al., 2006; Menon & Rubin, 2011). Based on the incipient role of the ICT in the educational system, this study has examined the use of ICT within the scope of counselling practices in a higher education context. The role of counselling in a university setting is vital in supporting students' mental health and academic growth; therefore, research pertaining to the intentions to use and attitudes towards ICT may be useful to bring about an awareness of the possibility of modernization and streamlining of psychological services at an institution for higher learning. This chapter aims to contextualize the study by discussing background information on ICT and the role of a counselling unit in higher education. The problem formulation and research questions of the study are provided. The chapter also provides a brief description on the methodology of the study. Thereafter, operational definitions and an outline of the chapters of the study are offered.

## **1.2. Introduction to the Research Background**

### **1.2.1. ICT and counselling**

Previous research has proven that ICT has contributed to the success of business processes in the banking sector (Luka & Frank, 2012), efficiency and effectiveness in tourism establishments (Tichaawa, Mhlanga, & Sicwebu, 2017), and improved quality of learning and teaching in higher education settings (Collins, 2013; Khan, Bibi, & Hasan, 2016). Given the significant role of ICT in improving service delivery (Adebowale, Papoola, Obisakin, & Oyaziwo, 2012), the psychology profession is in need of self-exploration and re-evaluation regarding ICT in counselling practices aimed at higher education settings (Tanrikulu, 2009). According to Mustapha, Abdullahi and Kolo (2012) ICT counselling can be a useful approach for both counsellors and students. Oye, Obi, Mohd and Amos (2012) are of the view that incorporating ICT for the purpose of counselling is essential in order to minimize uncertainties faced by students and also to decrease personality maladjustments, more especially after it has been noted that young people are increasingly turning to the internet for the support with their mental health problems (Stallard, 2010).

According to Perle, Langsam and Neirenberg (2011) ICT counselling has a potential of reaching a wide range of students, including those who might be uncomfortable to seek psychological help through face-to-face individual counselling. Studies indicate that young people, particularly, students do not always seek appropriate psychological help when they experience of mental health problems (Sawyer et al., 2012; Thapar, Thapar, Collishaw, & Pine, 2012), which therefore requires counselling practitioners to seek innovative ways of delivering support services to students. Previous research has found it common among male university students not to seek psychological help when faced with difficulties (Hope, Dring, &

Dring, 2005). It is further argued that, as men are less likely to access face-to-face counselling services (Sullivan et al., 2004), ICT may be an alternative mode especially for men to access mental health services (Begley, Chambers, Corcoran, & Gallagher, 2004). As noted, men who strongly adhere to images of masculinity and social stigma are more likely to prefer ICT counselling than individual face-to-face method (Bathje & Pryor, 2011; Reidy, Berke, Gentile, & Zeichner 2014). Similar to previous studies, a study by Neville (2012) concluded that males might prefer to seek information, advice and even psychological help online. However, a study by Awobil and Akosah (2018) found that female students were more willing to use ICT counselling than male students. On the other hand, some researchers found no significant difference in attitudes of students towards using ICT in counselling in relation to gender (e.g. Brown, 2012a; Glasheen et al., 2016; Tannous, 2017). Calls have been made for studies to further examine gender differences in relation to ICT counselling, due to the recent emergence of the use of ICT in counselling amongst university students and not enough studies have been conducted on the intentions and attitudes towards ICT counselling for gender differences to become evident (Brown, 2012a; Teh, Acosta, Hanchanova, Garabiles, & Alianan, 2014; Tannous, 2017).

ICT counselling services is already in use in other countries, such as Kenya (Pattison, Hanley, & Sefi, 2012); Nigeria (Omeje, Eze, & Egeonu, 2016); Australia (Glasheen & Capmbell, 2009); Europe (Vossler & Hanley, 2010). The emergence of ICT counselling was based on the hope that it will increase the accessibility of therapeutic services (Pattison, Hanley, Pykhtina, & Ersahin, 2015). Young people who have used ICT counselling reported that they found it safe and felt less exposed, confronted and stigmatised (Hanley, 2012). Counsellors on the other hand also expressed the same positive sentiments that ICT counselling can be more convenient

and safer when working with young people (Dowling & Rickwood, 2016; Glasheen, Campbell, & Shochet, 2013). However, limited research has been conducted in ICT counselling in South Africa. As much as the successful integration of ICT in counselling would depend largely on the availability, competence and attitudes of counselors towards ICT counseling services; it is important to examine what student's intentions and attitudes are towards using ICT for the purpose of counselling (Mutsapha et al., 2012).

International research highlights that students who have previously utilized ICT counselling endorsed it as a good alternative for their mental health needs (Brown, 2012b). This suggest that students' needs are outpacing current resources, for example traditional face-to-face counselling that are used in student counselling units. In order to meet some student's demands, it might be worthwhile for counselling units to consider ICT counselling (Brown, 2012a), especially in the South African context where there is a little research on the intention, attitudes and actual utilization of ICT counselling amongst students.

### **1.2.2. Student counselling units in higher education**

Student counselling units at universities or colleges provide valuable services for students in need, and contribute toward optimizing their potential. Whether they are struggling to adapt to their first year of university or trying to cope with the pressure of exams, students often need assistance, be it emotional support, aid with study skills, or any other problem, or difficulty. Nevertheless, student needs at university counselling units are outpacing current resources. For instance, Storrie, Ahern, and Tuckett (2010) found that, many university counselling units reported limited resources to adequately support individuals with different conditions. According Garlow et al. (2008, p. 482), counselling units have a mandate, "to provide effective mental health

outreach and treatment services” to vulnerable students. Amongst those vulnerable are gays, lesbians, bisexuals, transgender, and international students (Russell, Van Campen, Hoefle, & Boor, 2011). Evidence suggest that the rise in the number of students who are presenting with psychological problems creates pressure on university counselling units (Stallman, 2010; 2012). Therefore, in a contemporary population such as students’ which includes many different cultures, races, languages, and religions, counselling units should ensure that their services are accessible to this increasingly diverse student population and should adopt a welcoming attitude toward students of all cultures, creeds and sexual orientations (Boyd et al., 2003; Hodges, 2011; Morgan, Ness, & Robinson, 2003). It is therefore necessary for counselling units to reinvent itself (Brown, 2012a).

According to the California State University Select Committee on Mental Health, (2010), the key in this transformation is the use of technology, increased data and outcome measurement via technological advances, more innovative models of service delivery, and referral. Brown (2012a) is also of the opinion that a potential alternative delivery method with significant relevance at the higher institution level is ICT counselling. The university or higher education population uses online and media communication extensively (Richards, 2009), therefore counselling units have the responsibility to conduct ongoing evaluation and accountability research in order to assess the effectiveness of their services, and to find ways in which to improve those (Boyd et al., 2003). Wong, Bonn, Tam and Wong (2018) suggest that, in addition to face-to-face counselling services, it could be worthwhile for student counselling units to offer ICT counselling in order to increase effective utilization of counselling services.

### **1.2.3. Bridging the gap: counselling services using ICT**

The use of ICT is changing the way in which people are dealing and treating their problems (Zamani, Nasira, & Yusooff, 2010). For instance, at present, it is possible for a person to log on to the internet, find a counsellor and have a counselling session online (Andersson, Bergstrom, Hollandare, Carlbring, Kaldø, & Ekselius, 2005). According to Grohol (2011), the use of distance communication technologies to deliver mental health and behavioural services has been around since the 1990s and has expanded and developed with the increasing use of the internet. Counselling services using ICT is defined by Mallen, Jenkins, Vogel and Day (2011, p.764), as “any delivery of mental or behavioural health services, including but not limited to therapy, consultation and psycho-education by a licensed practitioner to a client in a non-face-to-face setting through distance ICTs such as the telephone, asynchronous email, synchronous chat, and video conference”. Therefore, understanding the impact of ICTs especially on end-users through their perceptions and experiences can be a launch-pad to improving delivery of services (Hsiao & Yang, 2011).

In modern society, the use of ICTs has become popular (Li, Yang, Song, & Lu, 2012) and usage of such platforms should extend beyond use of ICTs for teaching (Richards, 2009) but also understanding the ways to improve quality of life. In South Africa, the student cohort faces a number of challenges, notably but not limited to, drug abuse, alcohol abuse, suicide, and teenage pregnancy (Mouton, Louw, & Strydom, 2013). However, in spite of these challenges research indicates that university students do not seek psychological help (Yu, Fu, Zhao, & Davey, 2010). Sedibe (2011) argued that previously disadvantaged individuals in the present day South Africa face different challenges when compared to their white counterparts. These challenges include lack of access to educational resources, lack of career



guidance information not just in their schools but also in their communities (Ramjit, 2015). Traditionally, it has been the role of psychologists especially counselling psychologists to assist young people with such challenges. But due to the policy of apartheid which was rooted in the idea of separateness, racially classified citizens, designated job opportunities, physically separated, and isolated educational opportunities by colour (Cottrell, 2005), black disadvantaged students were not exposed to such services.

A notable change, especially in the university campus setting is the role of ICT (Chinyamurindi & Shava, 2015). Firstly, ICTs have become the popular means by which students communicate and engage with the world (Shava, Chinyamurindi, & Somdyala, 2016). However, within South Africa less empirical research exists connecting the usage of ICTs amongst students with counselling. Secondly, empirical work exists that shows that students especially in the campus setting prefer or were willing to use more informal forms of mental healthcare such as informational websites or ICT counselling (Klein & Cook, 2010; Richards, 2009; Ryan, Shochet, & Stallman, 2010). Nevertheless, the majority of students lacked sufficient understanding and awareness of the online counselling services are available for utilization and what it entails. This calls for empirical investigation into how ICTs are not only perceived by students but also experienced by them for the purpose of counselling (Richards, 2009). Finally, the need for such a study is heightened, as evidence exists indicating that ICTs can be used to assist students (Richards, 2009).

### **1.3. Problem Formulation**

The advancement of technology and its diffusion within society implies that in today's economy, mental health practitioners and counsellors cannot ignore the influence of ICTs especially amongst the student population (Li et al., 2012). An

increasing number of individuals are exploring the internet for mental health and behavioural services, and although preliminary research has shown counselling through the use of ICTs to be beneficial for clients (Richards & Vigano, 2013), it is still unclear whether or not it is an effective mode of service delivery especially in a higher education context (Richards, 2009; Ryan et al. 2010). There is also a lack of national research focusing on the role and extent of the impact of ICT within the domain of psychological counselling (Mallen et al., 2011). This is of great interest, especially as there is recognition of the need to study the influence (including intentions and attitudes) of ICT usage within psychological counselling on an international level (Brown, 2012a). Furthermore, international research acknowledges the popularity of ICTs in delivering mental health and behavioural services (Brown, 2012a; Mallen et al., 2011). Therefore, there is a need for South Africa to keep abreast with such happenings as a way of improving services. Furthermore, research exploring students' intentions and attitudes does not provide a clear distinction on which group of students in relation to demographics such as gender, age, ethnicity and race would most likely be interested in utilizing ICT mental health support (Brown, 2012a; Teh et al., 2014; Tannous, 2017). It is therefore, important to gain a thorough understanding of student's intentions and attitudes towards ICT mental health services in order to encourage utilization of ICT counselling services amongst universities in South Africa. The overall aim of the study was therefore to investigate university students' attitudes towards and intention to use ICT counselling services. Specific research questions based on the overall problem statement were formulated as follows:

#### **1.4. Research Questions**

- Are there any significant gender differences amongst university students regarding the intention to use ICT counselling services?

- Are there any significant gender differences amongst university students regarding their attitude towards ICT counselling services?
- Are there any significant age differences amongst university students regarding the intention to use ICT counselling services?
- Are there any significant age differences amongst university students regarding their attitudes towards ICT counselling services?

## 1.5. Hypotheses

The following hypotheses have been formulated:

### **Hypothesis 1**

H<sub>0</sub><sup>1</sup>: Gender differences amongst university students are not significantly related to the intention to use ICT counselling services.

H<sub>1</sub>: Gender differences amongst university students are significantly related to the intention to use ICT counselling services.

### **Hypothesis 2**

H<sub>0</sub><sup>2</sup>: Gender differences amongst university students are not significantly related to the attitudes towards the use of ICT counselling services.

H<sub>2</sub>: Gender differences amongst university students are significantly related to the attitudes towards the use of ICT in counselling services

### **Hypothesis 3**

H<sub>0</sub><sup>3</sup>: There is no significant age difference amongst university students regarding the intention to use ICT counselling services.

H<sub>3</sub>: There is a significant age difference amongst university students regarding the intention to use ICT counselling services.

#### **Hypothesis 4**

H<sub>0</sub><sup>4</sup>: There is no significant age difference amongst university students regarding the attitudes towards the use of ICT counselling services.

H<sub>4</sub>: There is a significant age difference amongst university students regarding the attitudes towards the use of ICT counselling services.

#### **1.6. Research Methodology**

This study followed a quantitative research approach, in order to gather data from large samples such as university environment and be able to quantify the numerical data through the use of statistical tools (Lewis, Proctor, & Brownson, 2017). The rationale for following this approach for this study was to obtain data from participants about their intentions and attitudes towards ICT counselling services, which can be best measured by quantitative methods. The sample of the study included all students registered at one of the historical disadvantaged universities in the Eastern Cape, in which data collection took place by means of a self-administered questionnaire. Data analysis of the study included a descriptive and inferential analysis carried out through SPSS.

#### **1.7. Operational Definitions**

**Counselling:** The DCCD (Directorate: Counselling and Career Development, 2012, p. 1) defines counselling as a helping process that takes place in an atmosphere of acceptance, respect, and trust. Counsellors work with students to help them understand themselves, their behaviours, feelings, and relationships. The purpose of counselling is to help students identify their personal strengths and develop ways to deal with their problems.

**Counselling Practitioners:** Refers to psychologists registered with the HPCSA as counselling psychologists and employed by the university as student counsellors.

**ICT Counselling:** Dowling and Rickwood (2013) posited that there is a diverse range of terminology for the way in which services are provided through the internet, as well as the type and modality for what counselling and helping facets look like through internet platforms. The range may include text messaging, synchronous as well as asynchronous interactions via the mental health professional, educational resources and websites, chat rooms, Instant Messaging, and e-mail (Dowling & Rickwood, 2013). The emphasis in many of these modalities, with the exception of real-time video conferencing, is often written and text based through writing (Glasheen, Campbell, & Shochet, 2013). In the context of this current study, ICT counselling is all inclusive of counselling interventions or mental health services that are conducted via ICT platforms, such as text messages internet through the computer or Smartphone, real-time messaging, video conferencing, email, texting, or psycho-educational platforms under the direction of a counsellor or an online curriculum.

**Information Communication Technology (ICT):** In this study, ICT is considered a combination of all digital devices, including telephone, asynchronous email, synchronous chat, and video conference, computers, interactive whiteboard, internet, and printers.

**Students:** Students refer to individuals who are registered for formal education at a University.

## **1.8. Structure of the Thesis**

This dissertation consists of six chapters. Each chapter contains the information and data relevant to the section.

### **Chapter 1: Introduction**

This chapter introduced the study and included a background description of the context within which the study takes place. The aim, objectives and hypothesis of the study were discussed. The chapter also highlighted the method in which the study was conducted and operational definitions were also provided.

### **Chapter 2: Literature Review**

This chapter provides an overview of the literature related to the use of technology in the educational context more specifically counselling services at institutions of higher learning. A discussion is provided of the findings of previous studies that have explored the perceptions of students and counsellors on using ICT for counselling.

### **Chapter 3: Theoretical framework**

This chapter consists of the discussion on the theoretical underpinnings of the study.

### **Chapter 4: Research Methodology and Design**

This chapter focuses on the methods that the researcher has followed in carrying out the study. The quantitative research design methods, population of the study and sampling strategies used are discussed. This section explains the data collection tools used as well as data analysis techniques used for the study, including measures of validity and reliability of the scales.

## **Chapter 5: Results and discussion**

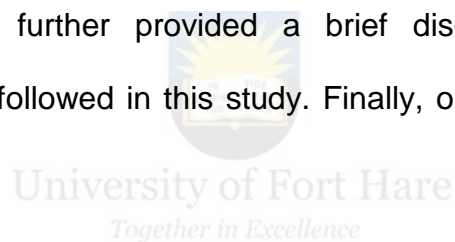
This chapter contains the research findings and discussion related to the intention and attitude of students regarding ICT counselling services.

## **Chapter 6: Implications, limitations and conclusion**

This section describes the conclusions in terms of the objectives of the study together with recommendations regarding ICT counselling in a higher learning context are made and possible future research.

### **1.9. Chapter Overview**

This chapter has highlighted the context of the research which gives a backdrop to the need for research on the use of ICT in counselling at an institution of higher learning in South Africa. The research questions and hypothesis of the study were presented. The chapter further provided a brief discussion of the research methodology and design followed in this study. Finally, operational definitions were outlined.



## **Chapter Two**

### **Literature Review**

#### **2.1. Chapter Preview**

This chapter provides an overview of the literature related to the objectives of the study. Chapter two commences with introducing the concept of ICT counselling and its modes. Thereafter, the use of ICT counselling in South Africa and in university student counselling centres are reviewed. Intention to use and attitudes of students towards ICT counselling in relation to gender and age are discussed. Finally, the benefits of ICT counselling and ethical guidelines regarding this mode of counselling are also stipulated.

#### **2.2. ICT Counselling Defined**

In this study the use of ICT in counselling is defined as services performed by a mental health professional through various ICT tools including email, chat (e.g., instant messaging or chat room), and videoconferencing (Brown, 2012a). This means that the relationship between the client and the counsellor is that of a one-on-one, the only difference is that the communication takes place via the internet (Deyzel, 2014). However, Kraus, Stricker and Speyer (2010) emphasised the importance of a therapeutic client and counsellor relationship no matter which mode of interaction and preference of the client. The review of literature commonly refers to ICT counselling as online counselling, cyber-therapy, e-counselling, web-counselling or computer-mediated psychotherapy (Barak, Klein, & Proudfoot, 2009; Brown, 2012a; Deyzel, 2014; Mallen & Vogel, 2005; Shiller, 2009). ICT counselling provides two main methods to interact with clients, namely: the asynchronous and synchronous communication mode (Brown, 2012a).



### **2.2.1. Synchronous mode**

In synchronous interactions, written or spoken dialogue occurs in “real time” when both the therapist and client have access to a computer (Derrig-Palumbo, 2010). This include instant messaging, voice and or video chatting (e.g., through Skype), virtual environments, and videoconferencing. Kraus et al. (2010) suggest that one of the advantages of a synchronous counselling session include the immediacy of the communication leading to increased intimacy between the client and the counsellor, together with the ability to schedule a specific date and time for the conversation. The disadvantage includes the loss of a reflective space since both the client and the counsellor need to respond immediately (Kraus et al., 2010).

### **2.2.2. Asynchronous mode**

Asynchronous technology (such as e-mail and online message boards) refers to delayed communication, where there is a delay between exchanges of the parties involved (Brown, 2012a). The therapist and client are not communicating with each other in tandem and time is a fluid entity. Neither the participant has to be at the computer at the same time, each has a chance to decide how and when to respond to the interaction (Yaphe & Speyer, 2010). Kraus et al. (2010) highlights one of the advantages of asynchronous communication in online counselling as the availability of the counsellor at any time even though the response is delayed, the client can sit and send an e-mail when he or she has an immediate need. The delay in terms of the communication should also be seen as an advantage in that both the client and counsellor have time to think and reflect on the process (Kraus et al., 2010).

The disadvantages related to asynchronous modes of counselling include: creation of a distanced relationship between client and counsellor (Evans, 2009; Kraus et al., 2010); uncertainty regarding receipt or non-receipt of communication (Jones &

Stokes, 2009); boundary issues in terms of limits with regards to the number of interactions that may take place in a given time period (Kraus et al., 2010) and the possibility of changing circumstances for the client (or the counsellor) due to the time delay (Jones & Stokes, 2009).

### **2.3. The use of ICT Counselling in South Africa**

The review of the literature supports the popularity of ICT counselling, more especially on an international level (e.g. Brown, 2011; Tannous, 2017; Zamani et al., 2010). However, there is no documented research on the use of ICT counselling in South Africa, despite international research providing evidence of positive attitudes toward ICT counselling amongst university students (Bato & Marcial, 2016; Richards, 2009). In today's society online counselling websites become essential due to the increasing number of people who are turning to the internet when seeking help (Brown, 2011; Tannous, 2017). One of the prominent websites that provide ICT counselling services in South Africa is known as MobieG. MobieG is a free online counselling network that provides text based counselling on social media as well as information and quizzes to educate young people to make more informed decisions. The website provides an option for live chat, support groups, articles, and quizzes. It also covers detailed information on the times available for live chats and the topics that are covered on support groups each day. In addition, another online counselling website that is running in South Africa is called therapyroom.ac.za. This website offers several online therapy programmes through Skype, video chat and telephone conversation as a backup in case of technical failures (Matuntuta, 2014).

The empirical research suggest that, ICT counselling can have a similar impact and is capable of replicating the facilitative conditions as face-to-face counselling (Richards & Vigano, 2013). Therefore, according to Tannous (2017), ICT counselling

websites should consist of the following elements: people who are designing the content of the website and explain the information with anyone who needs counselling online (Rochlen, Zack, & Speyere, 2004); there should be a scientific material that provides information and knowledge on who is eligible to receive the counselling and who will be the counsellor (Rochlen et al., 2004). The information contained in a website should provide means that will allow the interaction between the one who needs counselling and the counsellor online (e.g. live chat) and also, other alternative contacting methods should be highlighted (Rummell & Joyce, 2010). Websites are regarded as major common channel between young people and student population for knowledge sharing, because of its ability to create a safe, less exposing and stigmatized environment (Prescott, Hanley, & Ujhelyi, 2017).

#### **2. 4. The use of ICT Counselling in Student Counselling Units in South Africa**

Internationally, the use of ICT in providing counselling services to students at institutions of higher learning is widespread (Brown, 2012a; Deyzel, 2014; Efstathiou, 2009; Richards, 2009; Tanrikulu, 2009). This research indicates that students and institutions appreciate the use of electronic guidance due to its usability and speed of the service (Efstathiou, 2009). Furthermore, in a study conducted by Bambling, King, Reid and Wenger (2008) on the experience of counsellors providing ICT counselling to young people, clients cited several reasons for preferring ICT counselling than face-to-face, thus including convenience, the potential for daily control, affordability, and the ability to discuss sensitive issues sooner than in a face-to-face session. According to King et al., (2006) clients feel safer within an online environment to disclose information because of the nature of online communication that provides a greater sense of privacy, unlike the telephone call where they may be in fear of someone else listening to their conversations. On the other hand, it has been reported that students

at higher education institutions use ICT counselling services to address a diverse variety of needs, including career development, academic skills and personal issues (Deyzel, 2014).

Even though international research has proven that young adults including university students preferred or were willing to use ICT counselling (Klein & Cook 2010; Richards, 2009; Ryan et al., 2010), little research has been documented on the actual use of ICT counselling in South Africa (Deyzel, 2014). A study conducted at the University of South Africa (UNISA) on the experiences of e-counselling revealed that clients preferred a text-based electronic services and regard that e-counselling services could add a value in counselling (Deyzel, 2014). Furthermore, a pilot programme case study on e-counselling at University of Johannesburg was conducted to design, develop and test an online counselling programme within a naturalised setting via Psychological Services and Career Development by Errera, Roestenburg and Rensleigh (2012). In their case study, the most prevalent problems (57% of cases) reported by students were depression, relationship concerns and general coping problems. These findings are supported by the review of literature that depression and anxiety were prevalent amongst university students (Auerbach et al., 2016). This suggests that it is important for student counselling units to deliver interventions that can be easily available for everyone and the internet is regarded as an effective ICT medium to deliver mental health and behavioural interventions (Pattison et al., 2015). Given that ICT based counselling can be effective as traditional face-to-face counselling in variety of conditions such as adjustment disorders (Montero-Marín et al., 2016), health behaviours (Baños et al., 2015) and prevention of mental health disorders (Heber et al., 2017), South African universities need to keep up with the latest happenings, including providing counselling through ICT.

## **2.5. The role of Student Counselling Units in South African Higher Education**

### **Institutions**

Research studies have emphasized the psychosocial vulnerability of university students (McGowan & Kagee, 2013; Van Breda, 2013; Van Breda, 2017; Wade, 2009), amongst those challenges are depressive symptoms and suicide ideation, difficulty to adapt into a new environment (Hassim, Strydom, & Strydom, 2013), financial problems (Letseka, Cosser, Breier, & Visser, 2010), anxiety in relation to academic demands (Somer & Dumont, 2011), and lack of social integration into the university environment (Muldoon & MacDonald, 2010). Student counselling, career and development services in South Africa have been defined as “guidance, counselling and therapy to support adjustment, problem solving and decision making with regard to personal, psychological and vocational issues” (Beekman, 2001, p. 6). The role of student counselling units in South Africa is to provide support and contribute to the student’s success and throughput rate (Cilliers, Pretorius, & van der Westhuizen, 2010). The Student Counselling Services Center (SCSC) attempts to address as many of the students’ emotional needs as possible. Student counselling centres have been found to focus on crisis intervention, substance abuse counselling, career counselling, psychotherapy, study skills and generic workshop skills (Cilliers et al., 2010). Specific services on offer at the SCSC include assistance with self-esteem, stress, and motivation, coping with day-to-day challenges in romantic relationships, family problems, sexual issues, and assistance with study methods, tips for studying as well as self-efficacy amongst many others. Optimal functioning in these areas is said to lead to better performance in academics (Povey, 2003). Therefore, SCSCs contribute largely to the well-being of students (Botha et al., 2005). This suggests that students who seek this kind of help would generally improve in their academic

performance, as it is postulated by Deyzel (2014) that issues such as self-esteem, stress and self-efficacy influence overall academic performance. These services are rendered by student counsellors in institutions of higher learning and are seen as essential in terms of redressing past inequities in terms of access to higher education (Government of South Africa, 1997). A study conducted by Cilliers et al. (2010) to benchmark student counselling services in South Africa, found that the focus areas of South African student counselling centres are as follows: crisis intervention (100%); followed by substance abuse counselling; career counselling; psychotherapy; study skills; and generic workshop skills (91% each). The concerns that clients presented with most often were found to be academic problems (64%), relationship problems, and career development issues (55% each), and anxiety (45%) (Cilliers et al., 2010). Student guidance and counselling services play an important role in terms of decreasing student attrition, motivation, and preventing ineffective study choice (Crosier, 2007).

To meet the needs of students seeking counselling services, the roles, functions, and standards of students counselling units are continually changing (Brown, 2012a). According to Barnard, Deyzel and Kodisang (2010) there has been a shift in conceptualising student counselling services as individual face-to-face counselling services, to the development of self-help services designed by counselling professionals, with personalised support being available should the need arise. Flederman (2008) states that the expansion of web-based career services in South Africa, together with increased access for users because of national, provincial and local government initiatives provides greater access to ICTs. The provision of ICT facilities in student counselling units presupposes that counsellors and students can

use them to improve awareness, adjustment and learning (Anyamene, Nwokolo, & Anyachebelu, 2012).

The growth and advancement of ICT has made ICT counselling possible (Richards, 2009). More especially with the reports that university counselling units face high influx of students seeking counselling services particularly from April up until after the June examinations and again around from September and October until after the end of year examination (Bateman, 2017). As a result, students who are trying to access psychotherapy during these times may need to be placed on a waiting list. Therefore, the barriers of face- to-face counselling services could be overcome through the use of ICT counselling.

## **2.6. Global view on the Intentions and Attitudes towards ICT Counselling**

Several studies have reported general positive attitude towards ICT counselling amongst university students (e.g. Awabil & Akosah, 2018; Brown, 2012a; Tannous, 2017; Teh et al., 2014). A study conducted by Awabil et al. (2018) on the attitudes of Ghanaian students towards online counselling implied that students were willing to utilise ICT counselling. The above findings may be attributed to high academic demands, in which students may not be able to frequently honour their appointments with counsellors physically as compared to when they can receive counselling via internet in the comfort of their residences. Teh et al. (2014) reported positive attitudes toward ICT counselling, reflecting on its ability to provide client anonymity and eliminate social stigma. Furthermore, the study conducted by Glasheen, Shochet and Campbell (2016) on the use of online counselling by secondary schools in Australia, revealed that over 80% of students indicated that they would or might use ICT counselling if it was offered by the school counsellor. According to Glasheen et al. (2016), students who intended to seek ICT counselling were more likely to discuss

personal and sensitive information more openly when compared with traditional face-to-face counselling.

Contrary to the above findings, Awabil and Akosah (2018) also found that students demonstrated negative attitudes towards ICT counselling; where they indicated that seeking help with an online counsellor would be the last option to consider should they have personal problems. This finding is consistent with previous findings which indicate that students had less favourable attitudes towards seeking help online, and preferred traditional face-to-face counselling (Chang & Chang, 2004; Rochlen, Beretvas, & Zack, 2004). Students cited that the main reason for reluctance in engaging in ICT counselling is related to the lack of exposure to ICT counselling (Teh et al., 2014). In their study (Teh et al., 2014) on attitudes of psychology graduate students toward face-to-face and online counselling at three selected universities in Philippines, 15% of respondents were not willing to use or try ICT counselling, and believed that traditional face-to-face counselling is still better. This implies that a lack of exposure of ICT counselling can hinder the adoption of ICT counselling. Moreover, Awabil and Akosah (2018) stipulate that respondents prefer traditional face-to-face counselling because they are used to it, and trusting and confidential relationships in ICT counselling are more difficult to establish than in the traditional face-to-face counselling.

### **2. 6.1. Factors that influence students intentions and attitudes to seek help through ICT counselling**

Research documented in Australia indicates that university students are at a high risk of experiencing mental health illness problems (Ryan et al., 2010; Stallman, 2010), due to high academic demands (Collins & Van Breda, 2010) and challenges associated with transition to the university life (Wango, 2015). Nevertheless, Wade,



Post, Cornish, Vogel and Tucker (2011), found that few students seek professional help when experiencing such problems. Previous studies show that students who actually benefit from student counselling units are those who make use of such services which are regarded as a small percentage (Bathje & Prior, 2011; Nam, Chu, Lee, Lee, Kim, & Lee, 2010; Vogel, Wester, & Larson, 2007).

According to Flansburg (2012), there are several factors which lead students to avoid the use of counselling services offered on campus. Amongst which, researchers have reported gender differences in the attitude about and the use of counselling services (Nam et al., 2010; Vogel, Heimerdinger-Edwards, Hammer, & Hubbard, 2011), cultural norms and social stigma (Bathje & Pryor, 2011; Leong, Kim, & Gupta, 2011) and other demographics such as age groups, race or ethnicity and religion (Leong et al., 2011). As such, this study hopes to shed light on counselling services that are most preferable to students in one of the South African universities. In turn contributing towards a movement overcoming some barriers of help seeking behaviour (Gulliver, Griffiths, & Christensen, 2010).

#### ***2. 6.1.1. Gender difference on the intentions and attitudes for ICT counselling services***

Research findings on the international level suggest that male students are less likely to seek psychological help than female students (Maclean, Hunt, & Sweeting, 2013; Nam et al., 2010), because most of the time they believe that they do not need to do so (Smith, 2012). This attitude may be highly affected by perceived social stigma, the influence of societal, and cultural norms (Nam et al., 2010; Vogel et al., 2007; Vogel et al., 2011). According to Reidy et al. (2014), traditional gender roles which encourages men to be strong, self- sufficient, and in control in emotional situations may cause male students to be less likely to seek help. Men who strongly adhere to

masculine norms of displaying certain behaviour in order to be considered as men, seeking psychological help may mean admitting to being weak and dependent on other people (Reidy et al., 2014). Therefore, researchers extended this notion by concluding that male students who have a fear of violating masculine ideologies of what it means to be a man or who are emotional restrictive may prefer to seek help through ICT counselling (Neville, 2012; Rochlen et al., 2004).

On the other hand, others have alluded that the difference in seeking counselling services between male students and female students are related to the nature of the problem which requires one to seek psychological help (e.g. Möller-Leimkühler 2002; Vogel et al., 2007). For instance, researchers have found that when compared to men, women have a more positive attitude towards seeking help regarding mental concerns (Nam et al., 2010; Vogel et al., 2007). Nevertheless, others still maintain that regardless of gender differences, young people are more likely not to seek professional help when they have severe mental issues such as depression (Sawyer et al., 2012; Wilson, Deane, Marshall, & Dalley, 2010) .

With regards to ICT counselling, several international studies revealed that both male students and female students, showed positive attitudes towards ICT counselling (Bato & Marcial, 2016; Brown, 2012a; Glasheen et al., 2016; Teh et al., 2014). However, female students demonstrated more positive attitude toward ICT counselling than their male counterparts (Awabil & Akosah, 2018). Other studies, such as Lan (2016), conducted on the willingness to use cyber counselling amongst university students living with disabilities, indicated that gender was not a predictor of the willingness to use cyber counselling. This finding is in agreement with the findings of numerous researchers who found no significant difference in positive attitudes of the respondents towards ICT counselling in relation to their gender (Awabil & Akosah,

2018; Brown, 2012; Glasheen et al., 2016; Tannous, 2017). Nevertheless, Glasheen et al. (2016) suggested that further investigation is required on gender differences as its influence towards ICT counselling usage is still not clear. Furthermore, it is still not clear in the South African context as to which students are most likely to utilise ICT counselling. However, a study conducted by Bowman and Payne (2011) provided a profile of students who receive counselling services at the university in the post-apartheid South Africa. Their study found that black, female students within the age of 21-25 years category were more likely to receive counselling.

#### ***2.6.1.2. Age difference on the intention and attitudes for ICT counselling services***

Given that students may experience difficulties with their relationships, academic life and mental health concerns (Glasheen et al., 2016), it has been found that younger students are less likely to have positive attitudes towards seeking professional psychological help (Glasheen et al., 2016; Seyfi, Poude, Yasuoka, Otsuka & Jimba, 2013; Smith, 2012). Previous research indicates that young people would rather depend on their peers when they need help (Duckworth, 2011; Swords, Hennessy, & Heary, 2011). Gulliver et al. (2010) conducted a research on the barriers of seeking help amongst young people between the ages of 17- 25 years, and found that young people who had a negative experience with a counsellor are less likely to seek psychological services when the need arises. Lack of counsellor's trustworthiness and challenges associated with confidentiality in an education setting are amongst the factors that can hinder young people especially university students from seeking help (Gulliver et al., 2010; Guiffrida & Douthit, 2010).

In addition, a study conducted by Seyfi et al. (2013) on the factors that are associated with the attitude towards seeking professional help behaviour amongst

university students, found that younger students were less likely to have a positive attitude towards seeking professional help. They further reported that postgraduate students showed less intention or positive attitude towards seeking professional help. In Nigeria, Omeje et al. (2016) reported that undergraduate students were aware of the use of ICT counselling services and had high intentions to use it.

As students are perceived to be one of the largest groups of internet users, this makes them ideal candidates for ICT counselling. Stallard (2010) concurred that young people are increasingly turning to the internet for support with mental health problems. Internationally, ICT counselling has been shown to be a powerful therapeutic tool for university students (Richards & Tangney, 2008). Glasheen et al. (2016) also alluded that ICT counselling may be a valuable asset to the educational setting as it has a potential to provide students with more privacy and comfort. Tannous (2017) recommended that this is an additional area of research which still needs to be explored in order to understand how attitudes toward ICT counselling relate to variables such as age, educational level, faculties, marital status and socio-economic status.

### **2.6.1.3. Cultural norms and social stigma**

Numerous factors can lead university students to use or avoid seeking mental health services. Amongst those factors include cultural norms, family and social stigma as strong predictors of one's help-seeking behaviour (Nam et al., 2010; Vogel et al., 2010). Researchers found that the most common cultural factors that are associated with the use of counselling services amongst university students are race and ethnicity (Guiffrida & Douthit, 2010; Leong et al., 2011; Nam et al., 2010). According to Nam et al. (2010), race and ethnicity of students have an impact on how students interact with the world around them, which consequently affect their help-seeking decisions.

Moreover, a study conducted by Pheko, Chilisa, Balogun and Kgathi (2013) found that social stigma was the significant predictor of the intention to seek and receive psychological help amongst university students. According to Bathje and Pryor (2011), social stigma is influenced by the societal response to people who seek or receive psychological help. According to Vogel, Wade and Ascherman (2009), if student's surroundings such as university community, family and friends are supportive of help seeking behaviours, that student is more likely to engage to such behaviours. Stigma and discrimination reduces student's intention to engage in help seeking behaviour (Henderson, Evans-Lacko, & Thornicroft, 2013). As a result, Leahy et al. (2010) suggested that traditional methods of counselling might not be adequate or appropriate for tertiary population.

#### **2.6.2. Perceptions of counsellors toward the use of ICT in counselling**

The transformation from traditional, mechanical methods to a digital phase is a growing trend all over the world. With the advancement of internet applications, it is expected that online counselling will be a common phenomenon among counsellors (Tanrikulu, 2009). However, successful integration of ICT in counselling services depends largely on the availability, competence and the attitude of counsellors towards the role of modern technologies in counselling services (Grema-Alh, Umaru, & Mohammad, 2016). Efforts to integrate ICT had previously failed due to not considering counsellor's beliefs, skills and attitudes (Cuban, 2000). Therefore, a counsellor's role in the adoption of ICT in counselling services is an important exploration. A study conducted by Beidoglu, Dincyurek and Akintug (2015) found that counsellors had positive attitudes towards use of ICT in school counselling services. This finding also supports the findings of several researchers that school counsellors

had a positive attitude to use ICT in a school counselling (Savas & Hamamci, 2010; Vinluan, 2011).

Furthermore, the study by Beidoglu et al. (2015) did not find a significant difference in the school counsellor's perceptions according to gender, age and experience. This finding is surprising as one would expect that young counsellors born to a world characterised by the diffusion of technology would experience higher levels of comfort regarding the use of ICT than those who are born in a previous generation. In addition, Roody (2013) found no effect on the comfort level of the use of ICT based counselling on gender and years of experience. With the purpose of conveying information, counsellors perceived web pages, computer-based programs, emails and video conferencing as useful ICT application tools for counselling services. Similarly, Grosshandler (2012) established that counsellors considered internet and email usage as convenient ICT tools for conducting ICT counselling. In previous studies, school counsellors reported that they would consider offering ICT counselling if students would accept it (Glasheen et al., 2013; Glasheen, Shochet, & Campbell, 2014). A study conducted by Richards and Vigano (2013) found the effectiveness of ICT counselling to be at least equal to face-to-face counselling.

However, in spite of generally positive findings about ICT counselling, many counsellors believe that ICT counselling is not as engaging as face-to-face counselling (Glasheen, 2014). Often counsellors are concerned (as are some clients) that the lack of nonverbal messages will hinder the counselling therapeutic process and will fundamentally undermine the achievement of an effective counselling relationship (Glasheen, 2014). The absence of voice tone, body language, expression and eye contact seem fundamental to the practice of traditional counselling. In another study conducted in the United States by McLeod (2008) on general professional counsellors,

it was found that counsellors reported a low opinion and lack of knowledge about ICT counselling. These counsellors reported concerns about ethical and legal implications of online practice in relation to ensuring safety and the efficacy of counselling (Glasheen, 2014). According to Vinluan (2011), Filipino school counsellors also expressed concern about cost, as well as concerns with confidentiality and security regarding online school counselling. In addition, Glasheen and Campbell (2010) conducted focus groups with school counsellors and found that there were six broad themes that emerged for their reluctance to use ICT counselling in a school setting. The first one was the school counsellors' suspicion of technology. Those who participated in focus groups and interviews were not comfortable with online technology. The participants did not seem to feel comfortable with the digital world and for them using online technology was too unfamiliar. The second major theme was that the school counsellors expressed a lack of ICT counselling skills to conduct online school counselling. The common view was that the lack of non-verbal and the ability to hear the tone of voice were detrimental to establishing rapport and appreciating the client's emotional state. The online relationship was regarded as somehow not as genuine and therefore not suitable for counselling intervention. A concern about boundaries was a third theme identified by the school counsellor. The perception that the student could contact the counsellor anytime of the day prompted fears that it would be uncontrollable. The fear of litigation and the need to be accountable was a fourth theme evidenced in the focus groups. The fear of being responsible for not helping a student who was in danger was a major fear commented on by all groups. The fifth theme was indicated by reference to the school counsellors questioning the effectiveness of online counselling for the school setting.

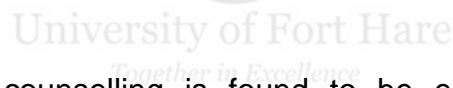
## **2.7. Benefits of ICT in Counselling**

The rapid growth of ICT has brought about remarkable changes in the 21st century (Nyambane & Mzuki, 2014). As a result, according to Beidoglu et al. (2015), many occupational fields are attempting to improve the quality of their services and customer satisfaction through the use of this rapid development of technology. The more the technology improves, the more the helping professional is able to utilize new technologies (Tanrikulu, 2009). The psychological counselling profession has been impacted by the rapid development of ICTs (Hayden, Poynton, & Sabella, 2008). According to Tanrikulu (2009), internet was one of the ICT modalities that impacted the field of counselling psychology. Dowling and Rickwood (2014) further assert that the growth of the internet and its possibilities of providing delivery of mental health services have been recognised since the mid-1990s. Through the widespread use of ICT, new Internet-based counselling applications through e-mail, web pages, electronic bulletins, online publishing, videoconferencing, and chat rooms emerged (Savas & Hamamci, 2010). This enables a drastically different shift from the conventional face-to-face counselling relationship approach to a more dynamic, flexible, and more convenient approach called online counselling (Grohol, 2011).

In the last decade, ICT counselling has rapidly gained prominence as an effective mode of providing mental health services, particularly to young people (Perle et al., 2011). The potential popularity of ICT counselling amongst the youth have been supported by Callahan and Inckle (2012) who indicates that, 80% of people accessing ICT counselling are young people, particularly females. Although, Callahan and Inckle's (2012) finding seemingly points towards the fact that ICT counselling is more apt amongst a younger generation. Dowling and Rickwood (2016) are of the view that only a small portion of young people actually access mental health services. Some of



the barriers that prevent young people from seeking mental health intervention include but are not limited to a lack of access to appropriate services, fear of stigma and negative attitudes to face-to-face mental health care (Dowling & Rickwood, 2016; Rickwood, Deane, & Wilson, 2007). However, these barriers are mainly based on the traditional view of counselling services and previous research suggests that ICT counselling may be able to help overcome these barriers (Barak et al., 2009; King, Bambling, Lloyd, et al., 2006). Furthermore, the emerged evidence indicates that online treatment is more preferable due to the fact that clients may experience the online environment as more comfortable and less threatening (Bradford & Rickwood, 2012; Cipolletta, Frassoni, & Faccio, 2017; Reynolds, Stiles, Bailer, & Hughes, 2013). Perle et al. (2011) support the notion that ICT counselling has the capability to reach a wider audience, including those who feel uncomfortable to seek face-to-face intervention and provide anonymous environment in which young people may disclose freely.



Furthermore, ICT counselling is found to be ensuring ethical and legal protection of the counsellor and client (Cherry, 2014; Mallen & Vogel, 2005). In addition, literature supports that ICT counselling is appropriate in dealing with challenges such as disability, LGBT, eating disorders, couple's relationships, and family problems (Barak, Hen, Boniel-Nissim, & Shapira, 2008; Gedge, 2009; Harry & Issack, 2013). On the other hand, a study conducted by Kolog, Sutinen and Vanhalakka-Ruoho (2014) on students life stories and perceptions of ICT counselling found that students were enthusiastic and wished to be engaged in a counselling session with the counsellor online. This finding is in agreement with Grohol's (2011) research findings which found that ICT counselling is drastically overtaking the conventional face-to-face counselling mode due to its flexibility, conveniency and

accessibility qualities. Some participants revealed that they could discuss and divulge information that could not easily be discussed face-to-face with the counsellor. This finding is supported by Omeje et al. (2016) that counselling through the use of ICT tools, allows both the client and the therapist an opportunity to pay close attention to their communication and reflect on their thoughts and feelings prior to them being expressed. The authors further state that this is probably a particularly suitable way of communicating and expressing oneself through words. Similarly, Haberstroh, Duffey, Evans, Gee and Trepal (2007), are of the view that clients may also be able to communicate better in this environment as they are not affected by the therapist's non-verbal cues.

## **2.8. Challenges of ICT in Counselling**

Despite the acceptance of ICT counselling in several studies (Bradford & Rickwood, 2012; Dowling & Rickwood, 2016; King et al., 2006; Perle et al., 2011) there is a general consensus that ICT counselling is not without its challenges (Zamani, et al., 2010). It has been criticized in terms of non-observation of verbal and non-verbal cues from both the counsellor and the client and the difficulty in maintaining the clients' confidentiality and security (Omeje et al., 2016). Thus, counsellors may overlook some important signs without the aid of non-verbal cues and they might make incorrect presumptions regarding the clients' cultural identity (Lau, Mohd- Jaladin, & Abdullah, 2013). Therefore, lack of knowledge about a client's cultural issues may limit the counsellor's credibility and eventually will lead to inappropriate counselling interventions. Furthermore, as ICT counselling is conducted via electronic utilities hindering factors such as irregular supply of electricity, inadequate procurement of ICT facilities, and poor maintenance of these facilities (Chiaha, Eze, & Ezeudu, 2013) are some possible barriers.

In addition, in a study conducted by Kolog et al. (2014), other students expressed their dissatisfaction about the ICT integration in counselling simply because of their inability to use the ICT. The study further revealed that none of the selected students responded positively for having used any online tools for counselling. They attributed their ignorance of ICT counselling to the university's failure to educate them about the use and availability of such a method of counselling. According to Elleven and Allen (2004), ICT counselling has been criticized in terms of technological difficulties and its limit of being able to guarantee the counsellor's credibility. In addition, Becker, Mayer, Nagenborg, El-Faddagh and Schmidt (2004) are of the view that ICT counselling support can have drawbacks for vulnerable people. For instance, Brown (2012b) highlighted that concerns have been raised regarding the ability of the counsellor to intervene in crisis situations. Clients are said to be in a state of crisis when their current coping mechanisms and resources are exceeded by an upsetting and intolerable situation (e.g. child abuse, domestic violence, and suicide attempts) (Gladding, 2004).

Crisis counselling is the act of helping clients find and develop effective coping resources for managing intolerable situations (Lester, 2008), which may be accomplished through normalizing client responses, acceptance, competency building, information and referrals, and problem solving (Williams, Bambling, King, & Abbott, 2009). However, ICT counselling is not seen as an effective mode of support for clients who are in a state of crisis (Brown, 2012b), due to the delay in asynchronous communication that is believed to increase clients' feelings of stress, anxiety and hopelessness (Rochlen et al., 2004, Williams et al., 2009). It is therefore emphasized that continuous education is important for counsellors as they need to be aware of the therapeutic techniques that are the most useful in an ICT environment (Haberstroh,

Parr, Bradley, Morgan-Fleming, & Gee, 2008), more especially for clients who are in a state of crisis. When used improperly or unethically, online support services can lead to dependency and the promotion of negative or harmful behaviour (Becker et al., 2004; Lester, 2008). To reduce improper or unethical use of online support services, the counselling profession has taken an active role in establishing guidelines and ethical codes of conduct for online counselling (Haberstroh et al., 2008).

## **2.9. Ethical concerns linked to ICT Counselling**

According to Tanrinkulu (2009), ethics are one of the most vital concerns about ICT counselling. It is an ethical duty for counsellors to warn or protect if clients present a danger to either themselves or others, however, it may be harder to access or to intervene, evaluate and manage psychological crisis via online counselling (Lau et al., 2013). According to these authors, counsellors may be facing difficulties to determine whether the client holds an appropriate mental capacity to consent because there is no pre-existing relationship between the counsellor and client beforehand. Other ethical concerns regarding the use of ICT in counselling include client anonymity, confidentiality and privacy issues (Kraus et al., 2010), equal access to services and counselling practitioner competence (Anthony & Nagel, 2010). However, these risks could be overcome through subscribing to ethical codes as relevant for the context within which the service is provided. For instance, in South Africa, the Health Professions Council of South Africa (HPCSA) provides guidance in terms of ethically sound counselling and therapy practice in the form of rules of conduct pertaining specifically to the profession of Psychology as captured in the Health Professions Act, 1974 (Act no. 56 of 1974). However, Shiller (2009) has advised that professional organisations, like the HPCSA in the South African context, should set a code of ethics that particularly pertain to the application of technology in counselling that addresses

specific issues such as the following: (a) the benefits and limitations of ICT counselling; (b) the application of technology assisted services, which includes whether clients are physically, emotionally, and intellectually able to use this service, and whether the service meets their needs; (c) inappropriate services and use; (d) access; (e) laws and statutes; (f) assistance; (g) technology informed consent, including confidentiality; and (h) the appropriateness of websites on the Internet. In addition to the ethical guidelines set out by professional organizations, counsellors must also establish their own ethical standards, specifically professional boundaries (Haberstroh et al., 2008). At the present moment there is a lack of code of conduct within HPCSA that guide online counsellors in relation to ethical concerns of ICT counselling.

## **2.10. Chapter Overview**

In this chapter, the study was located within the context of the broader field of counselling and the use of technology in counselling. Two different modes of online interaction, namely synchronous and asynchronous, were discussed, together with the advantages and disadvantages of each. The use of ICT in counselling, and the use of ICT in student counselling, together with related advantages and disadvantages were considered. Lastly, ethical considerations regarding ICT counselling were discussed.

## Chapter Three

### Theoretical Framework

#### 3.1. Chapter Preview

This chapter provides an overview of the theoretical perspective chosen for the study. According to Evans, Coon and Ume (2011), a theoretical perspective plays a role in providing results based on existing theories, increasing the credibility of studies and advancing the transfer of results to practice. In this study the researcher has combined two theories to guide the study; namely, the Technology Acceptance Model (TAM) (Davis, 1989, Venkatesh & Davis, 2000) and the Theory of Planned Behaviour (TPB) (Ajzen & Fishbein, 2000). The combination of TAM and TPB (C-TAM-TPB) was suggested by Taylor and Todd (1995) in order to overcome the limitations of a single theory and generate synergies from combinations of these theories, thereby improving explanatory power and model fit. A description of concepts for each theory has been provided, together with the rationale of chosen frameworks and their role in the behavioural intention towards the use of ICT.

#### 3.2. Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) (Davis, 1989) is used to investigate user acceptance of technology. It is described as a parsimonious theory of technology adoption established based on the premise that individual responses toward a technology can trigger intentions or curiosity to use the technology (Ducey, 2013), which in turn can influence the actual usage (Aggorowati, Suhartono, & Gautama, 2012). The TAM predicts user acceptance of a technology based upon estimation of three core constructs; perceived usefulness (PU), perceived ease of use (PEU) and behavioural intention (BI) (Svendsen, Johnsen, Almås-Sørensen, & Vittersø, 2013). According to Davis (1989), perceived usefulness refers to the degree to which an

individual believes that using a particular technology would enhance his or her job performance. Perceived ease of use refers to the degree to which an individual believes that using a particular technology would be free of physical and mental effort. Researchers developed the TAM to explore an inquiry into factors that may predict the use of technology and gain increased insight into motivators for use of technology (Davis, 1985; Svendsen et al., 2013). Basically, the TAM attempts to explain why individuals choose to adopt or not adopt a particular technology when performing a task. In other words, this theory is of the view that if a technology or innovation enhances a person's performance and does not greatly increase the effort required to perform a function, it is considered useful and easy to use, and the person will be more likely to adopt the technology, service, or behaviour (Davis, 1989). According to Davis, Bagozzi and Warshaw (1989, p. 985), "the goal of TAM is to provide an explanation of user behaviour across a broad range of end-user computing technologies and user populations, while at the same time being both parsimonious and theoretically justified".

Previous studies (Joo & Sang, 2013; Park & Kim, 2014; Wallace & Sheetz, 2014) support the validity and reliability of TAM in providing a foundation on how an individual intends to adopt or use technology. Moreover, Teo (2012) founded his research based on the premise of TAM to examine the causal relationship of behaviours related to the use of technology and predictors of usage. The results of his study showed that "perceived usefulness, attitude toward computer use and computer self-efficacy have a positive effect on behavioural intention to use technology" (Teo, 2012, p. 309). This would mean that a positive perception toward technology and its practicality in terms of use may be an indicator of an intention to use this medium,

ultimately suggesting that positive attitudes might influence the way in which an individual uses technology (Teo, 2012).

On the other hand, TAM has not only been used to provide an explanation of user behaviour toward technology acceptance, but researchers (Golden, 2017; Porter & Donthu, 2006) have also modified and used it to gain a greater insight into how demographics influence the use of technology. For instance, Porter and Donthu (2006) modified the TAM to examine how an individual's demographics of race, income, age, and education influence the individual's beliefs and perception of technology. They found that age, education, income and race are associated differently with certain beliefs about the internet, and that these beliefs mediate consumer attitudes toward and, ultimately their use of the Internet. According to Venkatesh and Davis (2000, p. 186), "TAM has become well-established as a robust, powerful, and parsimonious model for predicting user acceptance". It predicts the usage and adoption behaviours in specialized context, for instance, TAM has been used successfully to examine technology acceptance in education (Lee & Tsai, 2010), customer relationship management systems (Pai & Tu, 2011).

### **3.2.1. The efficacy of TAM in predicting online behaviour**

The Technology Acceptance Model (TAM) is a prominent theory that seeks to investigate the attributes that influence technology adoption. As such many studies have been conducted to test the efficacy of TAM in predicting online. For example, Aypay, Çelik, Aypay and Sever (2012) tested the theory in predicting the intensity of technology acceptance among pre-service teachers and results indicated that there is a relationship between the model and information acquisition. Jiang, Chen and Lai (2010) also found that individual behaviours of technology acceptance are valuable but incomplete without looking at social factors and personal environment which are



known as PU and PEU. PU is seen by Pantano and Di Pietro (2012) and Teo (2012) as a subjective prospect that specific application systems will increase job performance within a particular organisation, which is also known as performance expectancy. Kwon and Wen (2010) observed that Perceived Ease of Use is anchored on the belief that it would be effortless and hassle free to acquire a particular skill also known as effort expectancy. Suki and Suki (2011) observed that the beliefs of PU and PEU to a large extent have direct links to the attitudes that determine the use of technology. Thus, according to Bagozzi (2007), the TAM anticipated that attitudes would have a positive influence on the mind-set that would gear human efforts towards the use of technology.

However, some researchers have identified certain noticeable limitations of the TAM. For instance, Khan and Woosley (2011) noticed that most of the studies that have validated TAM involved academic environment and not business atmosphere. They alluded that this is not necessarily precise as it measures the variance in self-report use. Furthermore, factors measured in the adaption of Information Technology (IT) are also influenced by organization dynamics that are not included in the TAM and also studies only 40% of IT usage (Khan & Woosley, 2011). Therefore, Khan and Woosley (2011) advised that there is need to expand the TAM to embrace social and human factors. Bagozzi (2007) also concurred that it is not enough to examine the adoption of technology from an individual perspective because environment, exposure, society and economic status in the vicinity where technology is exposed to individual can collectively affect the adoption and use. Based on the above argument, the TAM is inadequate in explaining technology adoption by ignoring the societal influence that dictates technology adoption, in which are key variables in TPB (Taylor & Todd, 1995). In addition, other researchers like Benbasat and Barki (2007) criticized

the TAM for not being able to accommodate and adapt to the frequently changing IT settings and this has led to theoretical chaos and confusion.

### **3.3 Theory of Planned Behaviour (TPB)**

The Theory of Planned Behaviour (TPB) developed by Ajzen (1985) is an explanatory model that has been widely applied in diverse studies on behavioural intentions (Ajzen, 2012; Ajzen & Fishbein, 2005; Fraser et al., 2010; Lee, Cerreto, & Lee, 2010). According to Armitage and Conner (2001), TPB is one of the validated models for predicting human behaviours. It postulates that behavioural intention in, turn, is determined by three major determinants thus, attitude towards behaviour (AB), subjective norm (SN) and perceived behavioural control (PBC) (Ajzen, 2011). According to the theory, more positive attitudes, subjective norms, and higher perceived behavioural control increase the possibility of having a higher level of intention to engage in a particular behaviour. This means that the degree to which individuals see a certain behaviour positively (that is attitude), or foresees that substantial others want them to engage in the behaviour (that is subjective norm) and believe that they are capable of carrying out the behaviour (that is perceived behavioural control), serve as direct determinants of the extent of their intention to perform the behaviour (Ajzen, 1991). For example, in terms of the focus of the study, in order to make a decision about whether to utilize counselling services or not, individuals consider three main factors: their attitudes toward counselling services, their significant others agreement or disagreement about their help-seeking behaviour, and their time, available sources. Depending on which factor is the individuals' priority, that factor is more likely to affect their decision (Ajzen, 2011).

Furthermore, subjective norms incorporate a person's beliefs about the extent to which significant others think the person should engage in the behaviour or not (Kim

et al., 2013). Significant others refer to individuals with potential to influence a particular student's behaviour especially in making a decision to seek help (Manning, 2009). Subjective norms are presumed to judge the social pressures on individuals to perform or not to perform a particular behaviour (Kim, Ham, Yang, & Choi, 2013). Lastly, the third predictor of intention in TPB that is perceived behavioural control is the people's perceptions of their ability to carry out certain behaviour determined by an individual's perception of ease or difficulty in performing the behaviour (Ajzen, 1991). Thus, the extent to which individuals view a particular behaviour positively, think that significant others want them to engage in the behaviour, and believe that they are able to perform the behaviour, serve as direct determinants of the strength of their intention to carry out the behaviour.

### **3.3.1. The efficacy of TPB in predicting behavioural intention**

The TPB (Ajzen, 1985, 1991) is one of the well-studied theories to address the multiple variables affecting individuals' help seeking behaviors (Ajzen, 2011). However, TPB has also been proven to be effective in predicting intentional behaviours and technology use (e.g., Baker & White, 2010; Chen, 2013; Teo & Lee, 2010). In a study conducted by Lee and Tsai (2010), the TPB was applied to explain why people continued to play online games. The findings revealed that all three predictors of TPB positively related to participants' continued intention to play online games (Lee & Tsai, 2010). On the other hand, Bidin, Hashim, Sharif and Shamsudin (2011) used TPB as the underlying theoretical framework to investigate student's use of internet for academic purposes. Attitude, subjective norms and perceived behavioural control variables were found to be statistically significant determinants on internet use (Badin et al., 2011). Although many studies, as noted above, have supported the efficiency TPB in predicting behavioural intention and technology usage,

there are no studies that have employed TPB to explain students' intentions to use ICT for the purpose of counselling.

On the other hand, one of the criticisms of TPB is that it fails to account for motivational factors which induce an individual to form an intention to act (Kylea, White, Hyde, & Occhipinti, 2014; Sideridis, 2005). In other words, even if an individual has a positive attitude toward performing a behaviour, perceives social pressure to perform that behaviour and believes the behaviour is easily performed, it does not mean that the behaviour is important to the individual (Kylea et al., 2014). Furthermore, it has been argued that the TPB describes a reasoned decision making process and assumes that these motivational processes are inherent in the determinants of intention, rather than providing an explicit assessment of the motivational factors that may energise intentions (Perugini & Bagozzi, 2004), such as vested interest (e.g., Ajzen, 1988).

Nevertheless, Taylor and Todd (1995) contend that TPB has two factors that have been empirically verified by research to have remarkable influence on users' substantial usage behaviours for using technologies. These factors are not included in TAM, because Davis (1989) contends social variables and control variables show no remarkable associations with behaviours like the effect caused by usefulness. However, even though it has been argued that TPB emphasises behaviours (Timothy & Sulaiman, 2008), Taylor and Todd (1995) are of the view that social variables and control variables cause direct associations with behaviours. Therefore, both TAM and TPB are integrated to develop a C-TAM-TPB model.

### **3.4. The Rationale for the Chosen Frameworks**

Human behaviour is a complex process which is difficult to be explained by a single factor (Aguirre, 2012). The TPB and TAM are two important and useful theories used in studies of individual behaviour when utilizing ICT tools (Davis et al., 1989). The literature review undertaken for this study indicates that several studies have applied the TPB to scrutinize human psychological help-seeking behaviours (Aguirre, 2012; Chebbet, 2012; Hartong, 2011; Roldan-Bau, 2013; Schomerus, Matschinger, & Angermeyer, 2009). According to Ajzen (1985, 1991, 2011), the TPB is a well-studied theory to address the multiple variables affecting individuals' help-seeking behaviours. For example, a study by Hartong (2011) used the TPB to explain university students' psychological help-seeking process; the result of the study supported the adequacy of the TPB among university students. A further example is a study done by Smith, Tran and Thompson (2008) utilizing the TPB to predict help-seeking behaviour for mental health problems. For the purpose of this study, the TPB theory has been a useful framework in understanding student's behaviour regarding their willingness and intention to use online counselling services.

The theory of TAM on the other hand is useful to help provide insight into the variables that influence technology use and acceptance (Venkatesh & Davis, 2000). It is further considered as a well-established model and is widely accepted among researchers in the field of information technology (Ahmad, Madarsha, Zainuddin, Ismail, & Nordin, 2010; Teo, 2012). However, according to Venkatesh and Davis (2000), technology acceptance is a complex process and may be attributed to a variety of facets. For instance the key determinants of TPB which are the influence of social and control factors that are not used to measure the behaviour in TAM have been joined together to form the Combined Theory of Planned Behavior/Technology

acceptance Model (C-TAM-TPB) (figure1) (Venkatesh et al., 2003). In 1995 Taylor and Todd added subjective norm and perceived behavioural control to the TAM framework. The aim was to provide a more complete test of the important determinants of technology usage due to their predictive utility in technology usage research and their wide use in social psychology (Taylor & Todd, 1995).

Furthermore, a combination of constructs from these theories were used to explore the extent to which perceptions, attitudes and ICT tools available to students would predict their intention to use emerging technologies in the field of counselling. The C-TAM-TPB postulates that attitudes are influenced by perceived usefulness, and perceived ease of use. In TPB the subjective norms refer to when a person's perception that most people who are important to them think they should or should not perform the behaviour in question (Knowles, Nieuwenhuis, & Smit, 2009). Therefore, in an educational setting, students, parents, community, and colleagues could influence counsellor's normative beliefs on the use of ICT counselling (Kriek & Stolls, 2011). Consequently, the normative beliefs for students would be influenced by parents, counsellors, teachers and friends. According to Kriek and Stolls (2011), perceived behaviour control is influenced by individuals' control beliefs, in which McCabe (2004) defines control beliefs, as a function of both internal and external beliefs. "Thus intention to behave is a function of perceived internal control (i.e. confidence in skills and abilities) and behaviour is a function of external control (i.e. opportunity and resources available)" (McCabe, 2004 p. 503). Therefore, in this study, the internal control beliefs are about the counsellors' general technology competency, while the external control beliefs are about the availability of the IT infrastructure.

Previous studies have found both of these theories to apply to an individual's behaviour within the context of ICT use (Adams, Nelson, & Todd, 1992; Armitage &

Conner, 2001; Davis, 1989; Moon & Kim, 2001; Taylor & Todd, 1995; Van der Heijden, Verhagen, & Creemers, 2003; Venkatesh & Davis, 2000). It is with this in mind, that the researcher used the combination of both (C-TAM-TPB) to explain students perceptions and intentions to seek counselling services, and students intentions to adopt ICT for counselling services. Both of these adoption theories attempt to explain the process people go through when deciding to perform an activity for the first time (Sussman & Siegal, 2003). They are both useful in explaining the attitudes and intentions of students on the use of ICT counselling more especially in an environment (like the context of this study) where ICT has never been used for the purposes of counselling before. Taylor and Todd (1995b) concur that this is an adequate model (C-TAM-TPB) of technology usage for users who are both experienced and inexperienced with a technology system. The figure below (C-TAM-TPB), illustrate that, perceived ease of use causes positive influence on perceived usefulness. Both the perceived usefulness and perceived ease of use cause positive influence on attitudes. Attitudes, subjective norms and perceived behaviour control cause positive influence on usage behaviours.

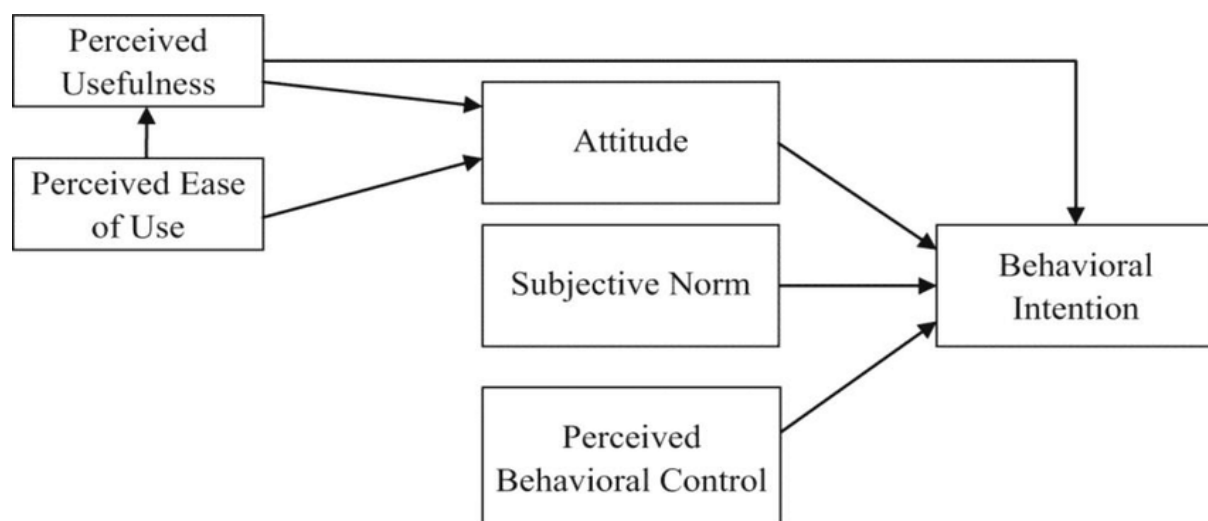


Figure1: C-TAM- TPB (Taylor & Todd, 1995)

### 3.5. Chapter Overview

This chapter provided the theoretical framework underpinning the study. The chapter provided a description of models that have been used to predict an individual's intention to use technology. The combination of both of these models provided a more accurate picture of issues that developers should consider in addressing system acceptability. Finally, the rationale for the chosen framework was provided.



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## **Chapter Four**

### **Research Methodology**

#### **4.1. Chapter Preview**

In this chapter, the quantitative research approach and methods employed to answer the research questions in this study are discussed. Chapter four focuses on the description of the research design, the data collection method as well as the analysis employed for the study.

#### **4.2. The Recap on the Statement of the Problem, Research Questions and Hypotheses**

##### **4.2.1. Statement of the problem**

Internationally there is an acknowledgement of the popularity of ICT in delivering mental health and behavioural services (Brown, 2012a; Mallen et al., 2011). Furthermore, empirical research conducted on the university population provides evidence that students are willing to use ICT counselling in dealing with their mental health problems (e.g. Brown, 2012a; Klein & Cook, 2010, Richards, 2009; Ryan et al., 2010). However, in the South African context the exact role and use of the ICT within the domain of psychological counselling remains unknown due to limited research that has been done on this topic at a national level. Therefore, there is a need to bridge the gap that currently exists within counselling in the South African context. It is with this regard that this study seeks to determine students' intentions and attitudes towards to use of ICT counselling in the context of South Africa.

#### **4.2.2. Research questions**

1. Are there any significant gender differences amongst university students regarding the intention to use ICT counselling services?
1. Are there any significant gender differences amongst university students regarding their attitudes towards ICT counselling services?
2. Are there any significant age differences amongst university students regarding the intention to use ICT counselling services?
3. Are there any significant age differences amongst university students regarding their attitudes towards ICT counselling services?

#### **4.2.3. Hypotheses**

The formulated hypotheses are as follows:

##### ***Hypothesis 1.***

H<sub>0</sub><sup>1</sup>: Gender differences amongst university students are not significantly related to the intentions to use ICT counselling services.

H<sub>1</sub>: Gender differences amongst university students are significantly related to the intentions to use ICT counselling services.

##### ***Hypothesis 2.***

H<sub>0</sub><sup>2</sup>: Gender differences amongst university students are not significantly related to the attitudes towards the use of ICT counselling services.

H<sub>2</sub>: Gender differences amongst university students are significantly related to the attitudes towards the use of ICT in counselling services

##### ***Hypothesis 3.***

H<sub>0</sub><sup>3</sup>: There is no significant age difference amongst university students regarding the intentions to use ICT counselling services.

H3: There is a significant age difference amongst university students regarding the intentions to use ICT counselling services.

***Hypothesis 4.***

H<sub>0</sub><sup>4</sup>: There is no significant age difference amongst university students regarding the attitudes towards the use of ICT counselling services.

H4: There is a significant age difference amongst university students regarding the attitudes towards the use of ICT counselling services.

**4.3. Research Approach and Design**

All research studies are based on research methods, approaches and designs which are appropriate for the development of knowledge in a given study. This section discusses the research designs, methods and approaches that guided this study.

**4.3.1. Research approach**

Research approach is defined as the strategy of investigation that moves from underlying assumptions to research design and data collection (Bazeley & Jackson, 2013). In addition, according to Creswell (2014), there are three research approaches that can be used to collect data namely qualitative, quantitative or mixed methods. The choice of the approach depends on the type of data that the researcher intends to collect from respondents (Burns & Bush, 2013). Subsequently, this research study has followed a quantitative method in answering the research questions. Quantitative research methods offer the advantage of providing a description and making inferences around numerical data generated (Creswell, 2014). According to Kumar (2014, p. 14), a “quantitative approach is rooted in the philosophy of rationalism, following a rigid, structured and predetermined set of procedures to explore, aims to quantify the extent of variation of a phenomenon”. On the other hand, Creswell (2013) views quantitative research as an approach that is used for the testing of objective theories by examining

the relationship among variables. These variables in turn can be analysed using statistical procedures.

#### **4.3.2. Research design**

A research design refers to an outline, plan or framework for a research project. It comprises pre-planned decisions that provide a master plan for executing a research project (Kotze & Higgs, 2011). Research design is classified into three categories: exploratory research, causal design and descriptive design. However, for the context of this study, the researcher has focussed on the descriptive research design. According to Feinberg, Kinnear and Taylor (2013), the descriptive research design is essential when information of a particular aspect is vague. As indicated in the review of literature, empirical research on the use of ICT for the purpose of counselling in the South African context is limited. Moreover, especially amongst university students there is a lack of research focusing on student population regarding the use of ICT counselling services both internationally and nationally. There are also conflicting reports regarding the relationship between gender and the intention to use online counselling service. This design was therefore deemed appropriate by the researcher due to its ability to give organized information regarding a phenomenon (Wegmann, Stodt, & Brand, 2015). Descriptive research is used to describe characteristics of a population or phenomenon being studied (Shields & Rangarajan, 2013). It does not answer questions about how/when/why the characteristics occurred (Yin, 2013) instead it allows the researcher to be able to describe opportunities or threats, and be able to answer questions such as who, when, what and where (Chinyamurindi, 2016).

Furthermore, there are two methods of descriptive research, classified as longitudinal and cross-sectional methods. A longitudinal study occurs when data is collected for the same study repeatedly over a certain period to compare trends whilst

cross-sectional methods involve people gathering data from a sample just once and is generally performed through surveys. There are a number of advantages of cross-sectional studies; these maintain that sample elements in a cross-sectional study are representative of the target population and a snapshot of the variables concerned is provided at a given point in time (Wiid & Diggins, 2013). Based on the merits of cross-sectional study mentioned above, a cross-sectional survey was used for this study.

#### **4.4. Population and Sampling**

The population consists of people from which the sample is going to be selected (Bryman & Bell, 2015). The population of this study were all students that were registered at the University for formal education. It should be noted that, the University in which the study was conducted had no ICT counselling unit or staff trained in ICT counselling, which heightened the need for this research. However, this selection only included students registered at campuses where counselling services were available. The researcher has used the Raosoft sample size calculator to come up with the sample size. The Raosoft sample size calculator is arithmetical computer software package that allows a researcher to electronically determine a sample size for a given population size (Meysamie, Tae, Mohammadi-Vajari, Yoosefi-Khanghah, Emamzadeh-Fard, & Abbassi, 2014). It is useful because it enables a researcher to estimate the adequate sample size with some degree of precision by entering population sizes, confidence levels and margin of error (Albert & O'Connor, 2012). Using the Raosoft sample size calculator for a population of 11 000, with a margin error of 5% and confidence level of 95%, the determined sample size was 372. Out of all the questionnaires that were distributed, only 266 questionnaires were deemed as valid and appropriate. Nevertheless, this sampling size achieved a 71% rate in terms of usability of the measures. Previous research that have used a university population (e.g. Kamunyu, Ndungo, & Wango, 2016; Richards & Tangney, 2008)

commend this response rate as usable. Furthermore, the sample was selected based on the convenience sampling approach. In convenience sampling, the sample is taken from a segment of the population that is readily available to the researcher and has a probability to be chosen to respond to the questionnaire (Bradley, 2013). The researcher has used this method because it is convenient and more cost effective to implement. It is also faster to carry out the sampling process using this method (Roberts-Lombard, 2002). Students that were accessible and convenient to the researcher were therefore identified to take part in the research study as respondents.

#### **4.5. Research Instrument**

This study has used a questionnaire as a research instrument. A questionnaire refers to questions put together and created to generate data necessary to accomplish the research project's aims and objectives (Cant et al., 2006). One of the advantages of a questionnaire is that it makes it possible to ensure confidentiality by maintaining the anonymity of the respondents (Idowu, 2017). As a result of the large size of the samples of quantitative research, the questionnaire allows for speedy collection of data and also enables the researcher to easily analyse and present the data (Creswell, 2014). According to Chinyamurindi and Louw (2010), questionnaires prove to have a higher response rate than other data gathering techniques like mail surveys and they are less expensive than other methods where the researcher must be with respondents at all times like personal interviews.

Due to the lack of empirical research focusing on the usage of ICT for counselling amongst students. Few standardised measures exist to assess ICT counselling attitudes and potential utilisation (Brown, 2012a). Therefore, there was a need for a researcher to modify and use different scales in order to answer the research questions and hypotheses of the current study.

The researcher first created a six item demographic questionnaire to collect information about respondents: gender, ethnic group, age, level of study, faculty and campus. The researcher then adapted two scales from previous research namely the Attitude Toward Seeking Professional Psychological Help Scale (ATSPPHS) (Fischer & Farina, 1995) and the Online Counselling Attitude Scale (OCAS) (Rochlen et al., 2004).

The ATSPPHS measures general attitudes toward seeking professional help for psychological concerns. However, the scale was modified to fit the context of seeking psychological help through ICT tools. The ATSPPHS is a 10- item shortened version of an original 29-item instrument (Fischer & Farina, 1995; Brown, 2012). Items with the highest item-total scale correlations were chosen for the revised version (Brown, 2012). Internal consistency reliability for the short form was found to be similar to the documented values for the Full Scale with  $\alpha = .84$  (Fischer & Farina, 1995). Rochlen et al. (2004) found internal consistency reliability of  $\alpha = .75$  on the ATSPPHS. Whereas, Brown (2012a) found the reliability coefficient of  $\alpha = .68$  which was notable lower than the reliability coefficients reported by Fischer and Farina (1995) but considered acceptable. Sample items included: “The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts” and “A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.” Respondents rated their level of agreement with each of the items using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The OCAS on the other hand is a 10-item questionnaire that assesses attitudes toward online counselling with two subscales: Value of Online Counselling (OC-V) and Discomfort with Online Counselling (OC-D). High scores for the OC-V and the OC-D indicate a positive view of online counselling and a high level of discomfort with online counselling, respectively. Rochlen et al. (2004) reported test retest reliability coefficients

of  $r = .88$  for the OC-V subscale and  $r = .77$  for the OC-D subscale while Rochlen, Land, and Wong (2004) reported test retest reliability coefficients of  $r = .93$  and  $r = .91$  for the OC-V and the OC-D subscales, respectively. On other hand, Brown (2012) reported the reliability coefficients for the OC-V and OC-D subscales of the OCAS to be  $\alpha = .84$  and  $\alpha = .78$ , respectively. Sample items include “It could be worthwhile to discuss my personal problems with an online counsellor” and “If I were having a personal problem, seeking help with an online counsellor would be the last option I would consider.” Participants rate their level of agreement with each of the items using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The newly combined and adapted questionnaire was first pre-tested on a sample of 20 participants where the researcher noticed that for the context of this study, there were some negatively worded items in both scales that needed adaptation and then reversed coded on the analysis. Negatively worded items can be defined as those having directionality opposed to the logic of the construct being measured (Weijters & Baumgartner, 2012). Recent research acknowledges reversed negatively word items in a Likert Scale (Gliner, Morgan, & Leech, 2017; Hartley, 2013). However, Weijters and Baumgartner (2012) recommends that the reversed item scales should be used in caution. The structure of the newly adapted questionnaire consists of: six demographic items, nine itemed modified ATSPPHS scale to measure student’s intention to seek psychological help through ICT counselling services and ten itemed OCAS scale to measure attitudes toward ICT usage in counselling. As it has been noted from the paragraph above that both of the scales are adopted from an international research, therefore there was a need for a researcher to test the reliability and validity of the scales in the South African context. The researcher used Cronbaph’s Alpha coefficient to assess; the ATSPPH scale yielded 0.613 in which according to Brown (2012a) is considered as



acceptable. The OCAS yielded a Cronbaph's Alpha coefficient of 0.894 and 0.811 respectively. The researcher chose self-administered questionnaires because they ensured anonymity and privacy of respondents thereby encouraging honest responses.

#### **4.6. Data Collection**

The data for the study was collected through a self- administered questionnaire. The researcher distributed questionnaires to respondents that were most accessible. Before the distribution of self- administered questionnaires, the researcher approached respondents individually from the spots where they were readily available in large numbers. Thereafter, the questionnaires were distributed to individuals who agreed to participate on the study. In addition, respondents were recruited during the day where the researcher had a target of distributing 30 questionnaires a day until a required sample size was reached. This process of data collection lasted for the period of two weeks. The researcher was a student in the same university where the data was collected, therefore, ethical clearance certificate was used to request a permission for entry in both campuses.

#### **4.7. Data Analysis**

Quantitative data obtained from the questionnaires was validated, edited, coded, entered and cleaned before analysis was done. Descriptive and Inferential statistics was conducted through the use of the Statistical Package for the Social Sciences (SPSS). SPSS is a package of programs for manipulating, analysing and presenting data and is widely used in social and behavioural sciences (Landau & Everitt, 2003). SPSS is useful because it allows researchers to draw conclusions from data (Garth, 2008). In descriptive statistics the mean, mode and median provided simple reviews about the sample and the measures of the awareness and attitude scales (Burns & Bush, 2013), whilst inferential statistics provided further information on the differences between groups.

The statistical techniques of t-tests and analysis of variance (ANOVA) were therefore used to investigate gender differences in relation to the dependent variables of awareness, intention to seek psychological help and attitudes toward ICT usage for the total sample and the campuses separately as well. In addition, the Pearson correlation technique was used to determine the correlation coefficient between the level of awareness, intentions and attitudes towards the use of ICT for the purpose of counselling.

#### **4.8. Reliability and Validity of the study**

In an attempt to ensure the reliability and validity of the study, the researcher presented the proposed study to the Department of Psychology at the University of Fort Hare in South Africa, which consisted of four academics who were senior lecturers and research experts within the field of psychology and counselling. They gave the researcher an advice and recommendations in relation to feasibility, research design and methodology of the study. Secondly, the pre-testing and pilot testing of the instrument was conducted with a sample of students from another institution of higher learning who did not form part of the actual study. Based upon the feedback and input on the instrument, items that were not relevant to the context of the study were modified and some even eliminated. Thereafter, the Cronbach's Alpha coefficient was used to assess the reliability of the instrument. Finally, a qualified statistician in liaison with the researcher assisted in the analysis and validation of the results.

#### **4.9. Ethical Consideration**

According to Rubin and Babbie (2016), ethics demonstrates morality of individuals where someone can act ethically wrong or ethically right. For the purpose of this research, Rubin and Babbie (2016) defines research ethics as conformity standards of conduct of a specific profession. The researcher considered the ethical guidelines of the research by conforming to the policies and procedures set by the University of Fort Hare. This was

achieved by presenting a research proposal and applying for ethical clearance from the University of Fort Hare's Research Ethics Committee. To ensure that the research is in line with expected research ethics, the researcher abided by the following ethical considerations:

### **Informed consent**

Consent is not just a form, a signature or mark but a process of information exchange between the researcher and research participants on the whole research process. Information provided should be adequate, clearly understood by the research participant with decision making capacity and the research participant should voluntarily decide to participate (Ochieng, 2012). The researcher ensured that participants gave informed consent. This was done by providing respondents with adequate information to enable them to make a knowledgeable choice on whether to take part or not.

### **Confidentiality and Anonymity**

Confidentiality should be guaranteed for all respondents in all research investigations that are done (Rubin & Babbie, 2016). Respondents were assured of their confidentiality and anonymity by not being asked to share their names or identities. Furthermore, the respondents were given privacy and confidentiality through administering questionnaires by themselves without the infringement of the researcher. In other words anonymity is concerned with not linking a given response to a given respondent (Rubin & Babbie, 2016). Data collected from respondents was kept in confidence. Furthermore, respondents were required to sign an informed consent form before they partake in the study. No harm was placed on the respondents if they decided to withdraw or not participate in the study. The researcher also applied for ethical clearance from the University Research Ethics Committee (UREC). This study comprised

of primary data collection, therefore, anonymity, and confidentiality were taken into account.

#### **4.10. Chapter Overview**

This chapter highlighted the statement of the problem, research questions and hypotheses. The research design and techniques of collecting data were outlined. The advantages and disadvantages of a research technique used in this chapter are discussed. Thereafter, the population, research instrument, method of data collection, method of data analysis and reliability and validity of the study was provided. Finally, a brief discussion on the ethical considerations followed by this study was provided.



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## Chapter Five

### Results and Discussion

#### 5.1. Chapter Preview

This chapter provides findings of the data collected through questionnaires to answer research questions and also provide discussion on each hypothesis. Data was analysed through use of descriptive and inferential statistics. The summary tables and graphs indicating the results of the study are illustrated.

#### 5.2. Descriptive Statistics

##### 5.2.1. Biographical profile of respondents

This section presents the results of the descriptive statistical analysis. Descriptive statistics were done on demographic data collected from respondents.

**Table 1: Descriptive statistics for biographical variables**

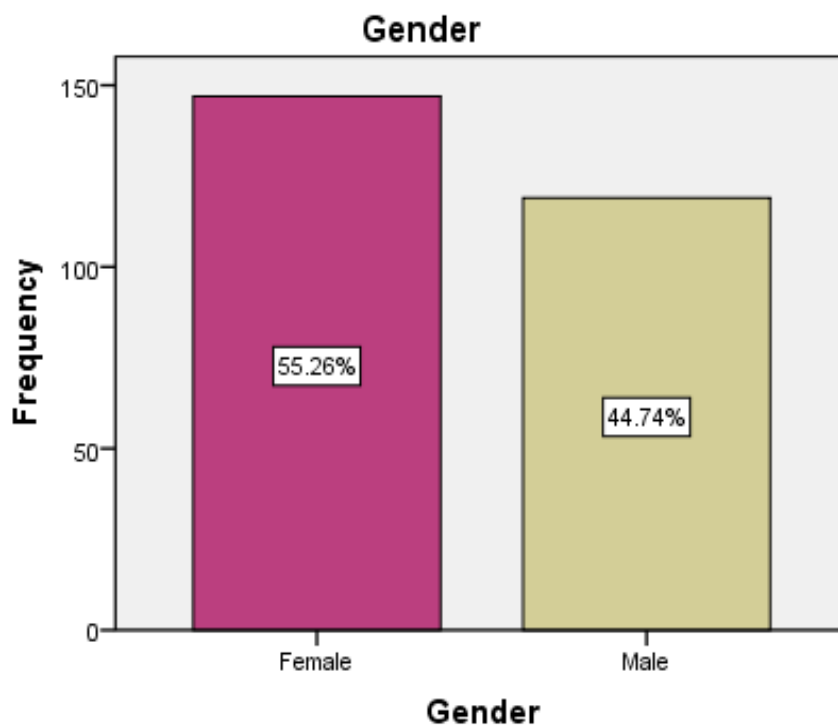
Variable	Levels	f	Valid %
Gender	Male	147	55.3
	Female	119	44.7
Ethnicity	Black	244	91.7
	Coloured	11	4.1
	White	3	1.1
	Indian	5	1.9
	Other	3	1.1
Age	Under 20 years	38	14.3
	20-25 years	177	66.5
	26-31 years	42	15.8
	32 and older	9	3.4
Educational Level	Level 1	65	24.4
	Level 2	54	20.3
	Level 3	80	30.1
	Level 4	44	16.5
Faculty	Post-graduate	23	8.6
	Humanities Social	38	14.3
	Management	175	65.8
	Law	31	11.7
	Nursing	19	7.1
Campus	Education	3	1.1
	Alice	92	34.6
	East London	174	65.4

The next section provides a graphical presentation and description of the descriptive statistics of the biographical information.

### 5.2.1.1. Gender distribution

Figure (1) below indicates a difference between the percentage of male and female students who participated in the research study. Figure (1) shows 55.3 % ( $N = 147$ ) males and 44,7% ( $N = 119$ ) females responded to the questionnaire. This shows that more male students participated in this research than their female counterparts.

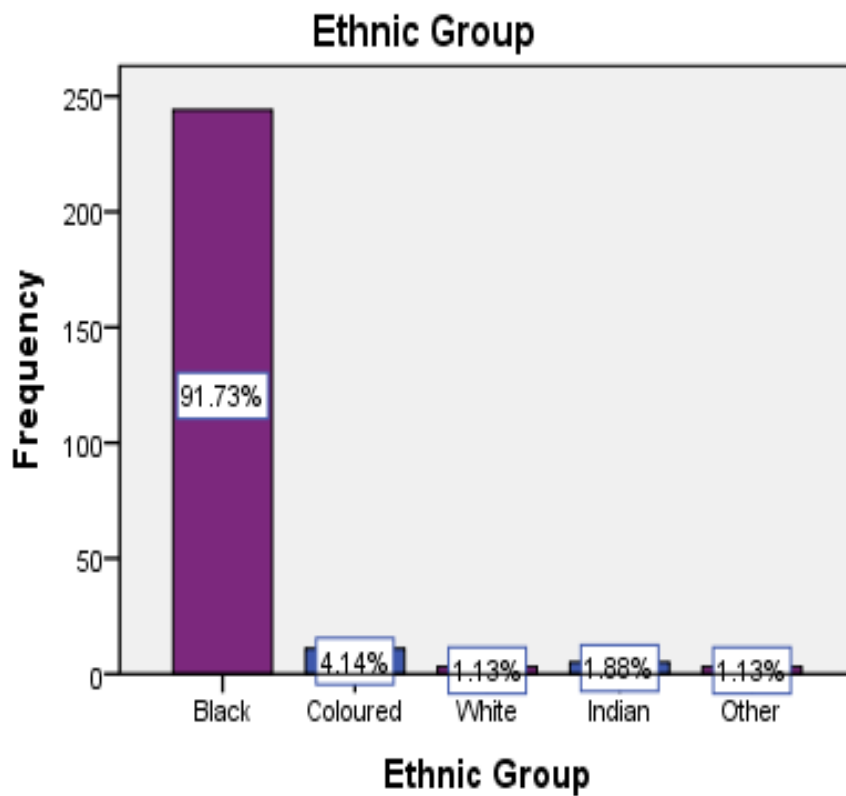
**Figure 1: Gender distributions of respondents**



### 5.2.1.2. Distribution by ethnic group

Figure (2) depicts that the highest number of respondents were Blacks with 91.7% ( $N = 244$ ), followed by 4.1% ( $N = 11$ ) of Coloured respondents. White (1.1%,  $N = 3$ ) and Other (1.1%,  $N = 3$ ) were the least represented ethnic groups followed by 1.9% ( $N = 5$ ) of Indians.

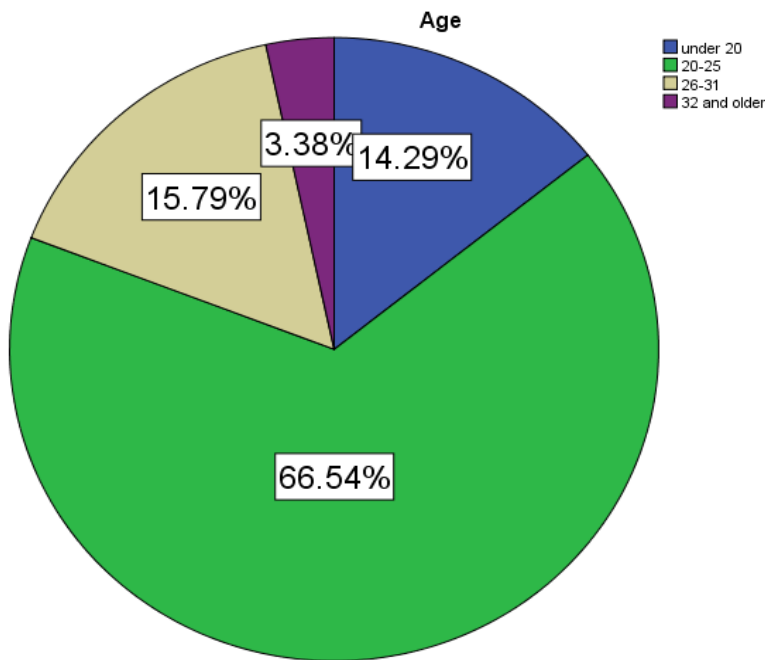
**Figure 2: Ethnic group distribution of respondents**



### 5.2.1.3. Age distribution

Figure (3) shows that the majority (66.5%,  $N = 177$ ) of respondents were aged between 20 and 25 years. The second largest age group was 26-31 years, represented by 15.8% ( $N = 42$ ) of respondents which is slightly closer to the number of respondents that were under 20 years with 14.3 % ( $N = 38$ ). The age groups of 32 years and older had the lowest number of respondents with 3.4%.

**Figure 3: Distribution of age of respondents**

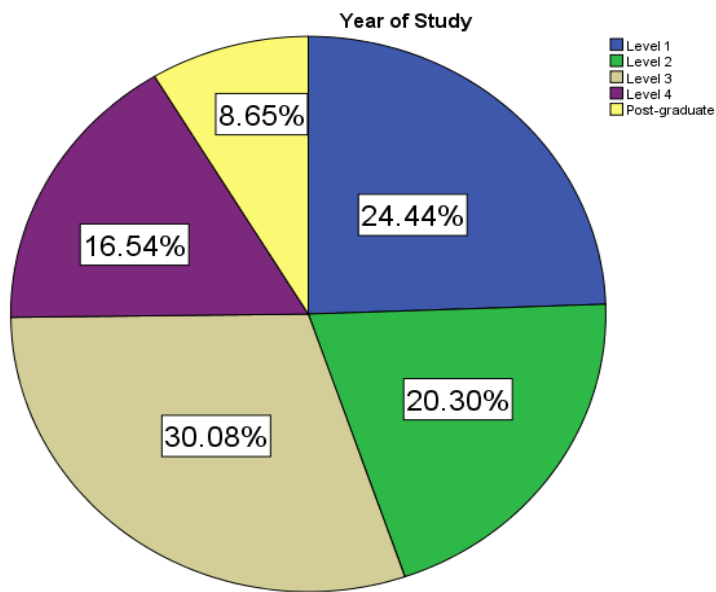


### 5.2.1.4. Distribution of educational level

As shown in figure (4) below, most of respondents (30.1%,  $N = 80$ ) were on level 3 of study, followed by 24, 4% ( $N = 65$ ) respondents doing level 1. The least number of respondents (8.6%,  $N = 23$ ) were post- graduates, followed by respondents on level 2 (20.3%,  $N = 45$ ) and finally level 4 (16.5%,  $N = 44$ ).



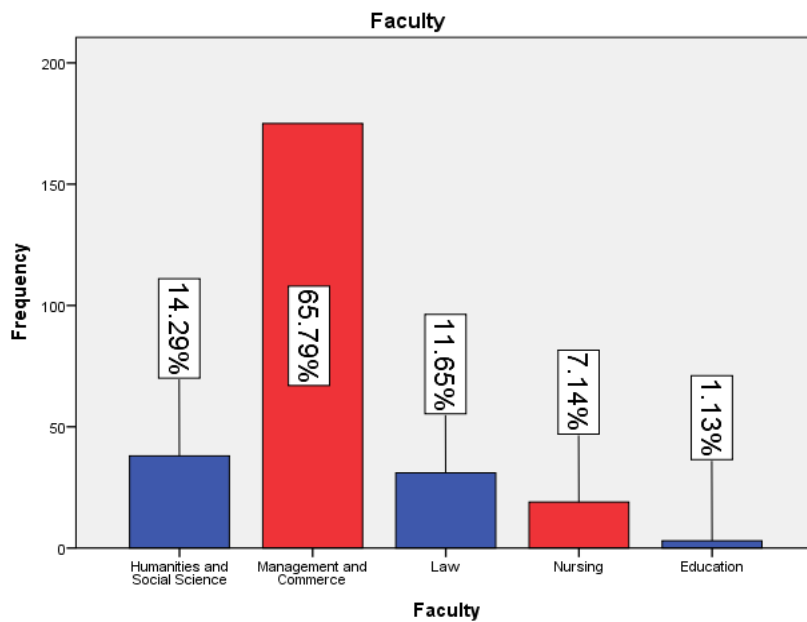
**Figure 4: Level of education distributions of respondents**



#### **5.2.1.5. Distribution of faculties**

Figure (5) indicates that the Faculty of Management and Commerce had the most respondents (65.8%,  $N = 175$ ), followed by the Faculty of Humanities and Social Science with 14.3% ( $N = 38$ ). The Faculty of Education had the least number of respondents (1.1%,  $N = 3$ ), followed by the Faculty of Nursing Science with 7.1% ( $N = 19$ ) of respondents. The Faculty of Law had 11.7% ( $N = 31$ ) number of respondents.

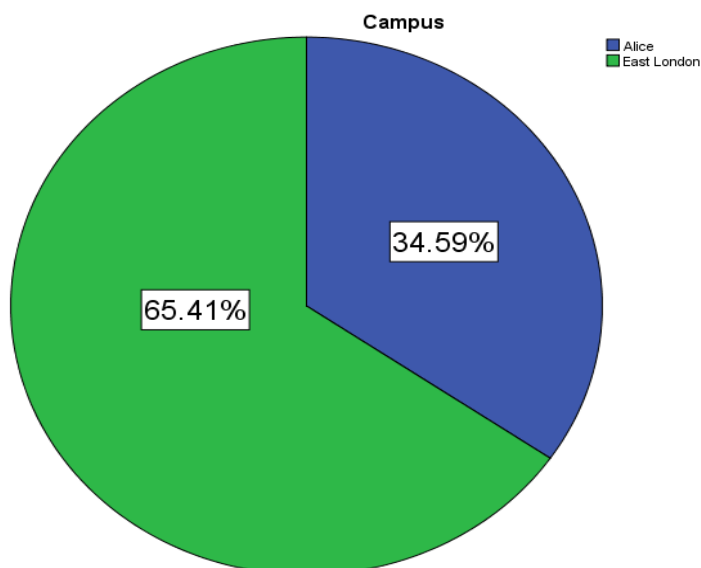
**Figure 5: Distribution of faculty of respondents**



**5.2.1.6. Report on study campus**

The figure (6) below shows that the majority (65.4%,  $N = 174$ ) of respondents were from East London campus and that 34.6 % ( $N = 92$ ) respondents were studying at the Alice Campus.

**Figure 6: Distribution of respondents per campus**



### 5.2.2. Descriptive statistics of study variables

**Table 2: Descriptive statistics of study variables**

Study Variable	N	Min	Max	Mean	SD
<b>Intention</b>	266	12.00	44.00	29.63	5.32
<b>Attitudes toward ICT</b>	266	10.00	46.00	29.83	5.97

Table 2 shows the mean level of study variables: Intention ( $M = 29.63$ ,  $SD = 5.32$ ); Attitude ( $M = 29.83$ ,  $SD = 5.97$ ). For all variables, statements were rated on a 5-point scale from 1 (Strongly disagree) to 5 (Strongly agree). The main aim of the study was to determine students' intentions to use and attitudes towards using ICT for the purpose of counselling. The results found a high mean of intention towards seeking psychological services through ICT counselling ( $M = 29.63$ ,  $SD = 5.32$ ) amongst respondents. These findings revealed that respondents are more likely to seek psychological help when their psychological wellbeing is being compromised. Contrary to the numerous studies (Julal, 2013; Wango, 2015; Yu et al 2010) which found that amidst of all challenges that university students are facing they are not willing to seek professional psychological help. Furthermore, the results indicated a positive attitude towards the use of ICT counselling ( $M = 29.83$ ,  $SD = 5.97$ ) amongst the respondents. Similar to previous studies (e.g. Klein & Cook, 2010; Richards, 2009; Ryan et al., 2010), the current results imply that students have a potential to utilize ICT counselling. The general positive attitude reported on this study on ICT counselling is also reported by numerous studies (Brown, 2012a; Tannous, 2017; Teh et al., 2014; Wango et al., 2018).

### 5.3. Hypothesis testing using Independent Samples T- test and ANOVA

Results of the Independent Samples T- test and ANOVA are presented below.

#### **Hypothesis 1.**

H<sub>0</sub><sup>1</sup>: Gender differences amongst university students are not significantly related to the intention to use ICT counselling services.

H<sub>1</sub>: Gender differences amongst university students are significantly related to the intention to use ICT counselling services.

**Table 3: Independent samples t-test of intentions and gender of respondents**

	Gender	N	Mean	Std Deviation	Std Error Mean	Sig. (2- tailed)
Intention	Females	147	30.41	5.23	.431	.006
	Males	119	28.66	5.08	.465	

The researcher has used an independent samples t-test to determine whether there are any significant gender differences amongst university students regarding the intention to use ICT counselling. The results revealed that there is a significant relationship of the intention to use ICT counselling amongst female and male respondents (0.006,  $p < 0.05$ ).

Females have a higher mean of intention ( $M = 30.41$ ,  $SD = 5.23$ ) than males. These results are consistent with previous studies which revealed that, female students have more positive views and attitudes towards seeking psychological help than males, consequently, with high levels of intention to use ICT counselling (Kamunya et al, 2016; Seyfi et al., 2013). Research studies have shown that university students experience significant stressors, which include but not limited to new life of transiting into a university life (Julal, 2013), increased academic demands, constrained finances and negative

academic performance (Helweg-Larsen, Harding, & Klein, 2011). According to Slaa and Barkam (2010), psychological well-being in students' decreases significantly just before the first semester at the start of university education. Even though counselling is regarded as significant to help university students when they face various life challenges, Kamunyu et al. (2016) found that only 35% of students with issues are utilizing counselling services majority of which are females.

The C-TAM- TPB stipulated that in order for an individual to engage in a particular behaviour, they first consider their attitudes, subjective norms and perceived behaviour control towards the behaviour (Ajzen, 2011). Which means that, men may not engage in a help seeking behaviour because of the belief that their significant others do not think they should engage (Kim et al., 2013). Previous research indicated that the use of services by males and females is highly affected by pre-existing attitudes, perceived social stigma, and the influence of societal and cultural norms (Nam et al., 2010; Vogel et al., 2007; Vogel et al., 2011).

According to Reidy et al. (2014), traditional gender roles which encourages men to be strong, self-sufficient, and in control in emotional situations may cause male students to be less likely to seek help. Men who strongly adhere to masculine norms of displaying certain behaviour in order to be considered as men, seeking psychological help may mean admitting to being weak and dependent on other people (Reidy et al., 2014). This, therefore, means male students may not utilize counselling services because of a fear of violating masculine ideologies. In short, this study concludes that gender differences amongst university students are significantly related to the intention to use ICT counselling services. Therefore, we reject the null hypothesis ( $H_0^1$ ) and accept the alternative hypothesis (H1) that gender differences amongst university students are significantly related to the intention to use ICT counselling services.

### **Hypothesis 2.**

H<sub>0</sub><sup>2</sup>: Gender differences amongst university students are not significantly related to the attitude towards the use ICT counselling services.

H<sub>2</sub>: Gender differences amongst university students are significantly related to the attitude towards the use ICT counselling services.

**Table 4: Independent samples t-test of attitude and gender of respondents**

	Gender	N	Mean	Std Deviation	Std Error Mean	Sig. (2- tailed)
Attitudes	Females	147	29.55	5.71	.470	0.391
	Males	119	30..18	6.30	.577	

To determine whether gender differences amongst university students are significantly related to attitudes towards to use ICT counselling, the t- test was examined. The results revealed that there is no significant relationship of the attitudes towards the use of ICT counselling amongst female and male respondents (0.391,  $p < 0.05$ ).

Similar to Awabil and Akosah (2018) and Glasheen et al. (2016) the current study revealed that there was no significant difference in the attitude of respondents towards the use of ICT counselling in relation to their gender. The current findings also support the study conducted by Brown (2012a) on the potential utilisation of online counselling amongst university students, which has reported that there was no significant gender difference in using online counselling as compared to face-to-face counselling. Awabil and Akosah (2018) attribute the reason for non-existing significant difference in gender to the possibility that both genders consider ICT counselling as a modern approach for counselling. Other international studies such as Bato & Marcial (2016) and Teh et al. (2014) also confirmed that both females and male respondents had a positive attitude towards the use of ICT counselling services. Nevertheless, the current study concludes

that, as presented in the results, gender differences amongst university students is not statistically significant to the attitude toward the use of ICT counselling services. Therefore, we accept the null hypothesis ( $H_0^1$ ) and reject the alternative hypothesis ( $H_1$ ) that gender differences amongst university students are significantly related to the intention to use ICT counselling services.

***Hypothesis 3.***

$H_0^3$ : There is no significant age difference amongst university students regarding the intention to use ICT counselling services.

$H_3$ : There is a significant age difference amongst university students regarding the intention to use ICT counselling services.

**Table 5: ANOVA of intention between age group of respondents**

Intention	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	229.893	3	76.631	2.860	.037
Within Groups	7020.002	262	26.794		
Total	7249.895	265			

The ANOVA was used to examine whether there is any significant age difference amongst university students regarding the intention to use ICT counselling. The results revealed that respondents who were under the age of 20 years had the least mean of intention ( $M = 28.21$ ) to use ICT counselling in comparison to respondents from other age groups, where the highest mean was amongst those that were between 32 years old and above. The difference in the mean of intention between age groups was proven to be statistically significant ( $t = 0.037$ ;  $p < 0.05$ ). This means that respondents who are below the age of 20 years are less likely to seek psychological help. The findings of the current study support previous studies which found that younger students were less likely to have a positive attitude towards seeking professional psychological help (Glasshen et al., 2016;

Seyfi et al., 2013; Smith, 2012). The review of literature has shown that, instead of seeking professional help young students would rather depend on their peers and internet for help (Duckworth, 2011; Stallard, 2010; Sword et al., 2011). Younger students are noted to have difficulties in identifying and describing emotions and to be more self-resilient due to the demands of stressors that are associated with transiting to university life (Julal, 2013). Therefore, we reject the null hypothesis ( $H_0^3$ ) and accept the alternative hypothesis ( $H_3$ ) that age differences amongst university students are significantly related to the intention to use ICT counselling services.

***Hypothesis 4.***

$H_0^4$ : There is no significant age difference amongst university students regarding the attitude towards the use as ICT counselling services.

$H_4$ : There is a significant age difference amongst university students regarding the attitude towards the use ICT counselling services.

**Table 6: ANOVA of attitude between age groups of respondents**

	Sum of Squares	df	Mean Square	F	Sig.
Attitude					
Between Groups	60.314	3	20.105	.560	.642
Within Groups	9412.408	262	35.925		
Total	9472.722	265			

To determine whether there is any significant age difference amongst university students regarding the attitudes towards the use ICT counselling services, the ANOVA was examined. The results revealed that there are no significant age difference between age groups of respondents (0.645,  $p < 0.05$ ) in relation to attitudes to use ICT counselling. Therefore, we accept the null hypothesis ( $H_0^4$ ) and reject the alternative hypothesis ( $H_4$ )



that there is a significant age difference amongst university students regarding the attitude towards the use ICT counselling services.

The results of the current study revealed no significant difference in the age of respondents toward their attitude of ICT counselling. Tannous (2017) recommended that this is an additional area of the research which still needs to be explored in order to understand how attitudes toward online counselling relate to the variables such as age, educational level, faculties, marital status and socio-economic status.

**Table 7: Summary of the hypothesis tested**

	Hypotheses' denotation	Hypotheses' description	Results	
Hypothesis 1	H <sub>o</sub> <sup>1</sup> :	Gender differences amongst university students are not significantly related to the intention to use ICT counselling services.	Reject	
	H1	Gender differences amongst university students are significantly related to the intention to use ICT counselling services.		Accept
Hypothesis 2	H <sub>o</sub> <sup>2</sup> :	Gender differences amongst university students are not significantly related to the attitude towards the use ICT counselling services.		Accept
	H2	Gender differences amongst university students are significantly related to the attitude towards the use ICT counselling services.	Reject	
Hypothesis 3	H <sub>o</sub> <sup>3</sup>	There is no significant age difference amongst university students regarding the intention to use as ICT counselling services.	Reject	
	H3	There is a significant age difference amongst university students regarding the intention to use ICT counselling services.		Accept
Hypothesis 4	H <sub>o</sub> <sup>4</sup>	There is no significant age difference amongst university students regarding the attitude towards the use as ICT counselling services.		Accept
	H4	There is a significant age difference amongst university students	Reject	

		regarding the attitude towards the use of ICT counselling services.		
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## 5.6. Conclusion

This chapter presented the results of the statistical analysis of the collected data. The first section of the chapter explored demographics of the sampled respondents. Lastly, inferential statistics were explored in order to determine whether the hypotheses set out would be rejected or accepted. A summary of the tested research hypotheses was presented in Table 7.



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## Chapter Six

### Implications, Limitations, Recommendations and Conclusion

#### 6.1. Chapter Preview

This chapter gives conclusions on whether the study answered the research questions and hypotheses of the study. In this chapter practical and theoretical implications, limitations and contribution of the study are discussed. Recommendations for future research are provided in light of findings from this study. Lastly, a summary of the study is presented.

#### 6.2. Implications of the Study

This section unpacks and provides a discussion on the implications of the study based on empirical evidence drawn from the study's statistical results. The implications are presented in way which explains how the results of this study contributes to literature dimensions of the studied phenomenon, counselling practitioners (university counselling units) and policymakers.

##### 6.2.1. Contributions to literature

The findings of this research study confirmed the findings of previous studies which found that the use of ICT could be an important mode of providing mental health (Perle et al., 2011; Richards & Tangney, 2008; Ryan et al., 2010), particularly to young people (Callahan & Inckle, 2012). Similarly to previous studies (e.g. Brown, 2012a; Rochlen et al., 2004) this study, found no significant gender difference in the attitude towards the use of ICT in counselling. According to Brown (2012a), a possible explanation for these findings could be attributed to the recent emergence of ICT counselling and not enough studies have been conducted on the potential utilization of ICT counselling for gender differences to become evident. Furthermore, in the context of C-TAM-TPB (Taylor & Todd, 1995) this study assessed possible motivational factors for seeking ICT counselling

through the use of an online attitude scale, and concluded that the potential interest in ICT counselling does not translate to the actual behaviour of respondents. Finally, this study contributed to the limited body of literature on ICT in counselling psychology, more especially in a university setting in South Africa.

#### **6.2.1.1. Practical contributions**

Frequent research evaluating the use of ICT in counselling services is essential, more especially in the rapid progression of technology in the 21<sup>st</sup> century and the rate in which people in nowadays are integrating the internet in their everyday lives. Owing to the popularity of ICT tools in the modern day society (Li et al., 2012), an increasing number of people are accessing information from such platforms. Universities provide a structured atmosphere where students can address their academic and personal issues. Although preliminary research has shown counselling through the use of ICTs to be beneficial for clients, it is still unclear whether or not university students would be interested in ICT as a mode of delivering mental and behavioural services. One of the key contributions of this study is that it demonstrated a considerable amount of interest amongst students regarding the use of ICT in counselling, which shows that ICT has great potential within a university setting.

The study has thus contributed to the understanding of student's interest in and attitude towards online mental health services in order to guide program development. The findings of this study further provide an insight on the type of students that can utilize ICT counselling services in the future. In determining the intention and attitudes of students toward counselling through the use of ICTs it further highlights the need for the counselling centre in which the study was conducted to re-evaluate and consider alternative counselling delivery methods. The study also provides a better understanding of students' needs as well as their willingness and openness towards online support.

Furthermore, potential barriers in implementing such services are highlighted despite ICTs popularity amongst today's generation. In line with the findings of Klein and Cook (2010), the results of this study demonstrate that ICT is still a very new mode of treating mental and behavioural challenges, in that it is not widely used or understood. Despite the lack of ICT counselling services at the university in which the study was conducted, the results suggest that it would be worthwhile for a counselling unit to seriously consider the use of ICT counselling services. By disseminating the results of this study, it is hoped that it would stimulate a discussion on how to best meet student needs and how to expand outreach efforts to students less inclined to seek or afford support. Therefore this calls for the need for counselling practitioners and university counselling unit to be educated and exposed to ICT counselling and its potential use in the university. In essence, the study suggests that the utilization of ICT in counselling might be worthwhile for the university in order to encourage students who would never otherwise engage in a face-to-face counselling and also reach to students who would be less likely to seek or afford other forms of help.

### **6.3. Limitations of the Study**

In spite of the notable contributions of this research, it has its own limitations. For instance, it should be pointed out that the research was confined to one University in the Eastern Cape. This means that results would only be more conclusive and generalizable to the entire population if the study had taken samples from more universities. In addition, data was collected through a convenience sampling method where data was collected from respondents that were accessible and convenient to the researcher. This means that results from descriptive analysis of biographical data might be biased and need to be considered with caution. More so, this study followed a quantitative research approach and could not determine if whether or not respondents understand what is ICT

counselling and what it entails. A qualitative research method would have helped establish which tools of ICT are most preferable for counselling. Furthermore, the research instrument of this study should be treated with caution, due to the lack of standardised scales that measure the intention and attitude towards using ICT for counselling. Finally, it should be noted that ICT counselling does not exist in the university in which the study was conducted. However, regardless of the above mentioned shortcomings, this study provides evidence that ICT may be an acceptable medium for psychological counselling for university students.

#### **6.4. Recommendations for Future Research**

Owing to the popularity of internet in the university environment, it is recommended that future studies continue to frequently explore students' interests and attitudes towards the use of ICT tools in counselling in order to determine which mode of counselling can be efficient for a certain group of students. A greater understanding is needed of the factors that will lead to the adoption of ICT for the purpose of counselling amongst students; therefore, qualitative research approach is recommended in order to gain more insights into the determinants influencing ICT usage in counselling. Additional measures need to be created to obtain the core value of ICT counselling including disinhibition, anonymity, and increased client control. Finally, information on the efficiency of ICT counselling can be gained from counselling practitioners in the field and perceptions of clients who have used ICT counselling before.

#### **6.7. Conclusion**

The main aim of the study was to explore the intention and attitudes of students on using ICT for counselling. The findings of the study revealed that respondents had a positive attitude towards ICT counselling; if online counselling was offered on campus, respondents would be more interested in seeking psychological services through this

mode of delivery. This chapter presented the final conclusions and implications of this research study based on the results of this study. Moreover, the chapter provided theoretical, practical and policy implications of the study. Lastly the chapter provided recommendations for future research as well as the chapter conclusion. The research concluded by recommending options for further research which included exploring different research methodologies.



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## APPENDICES

### Annexure A: Ethical Clearance



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### ETHICAL CLEARANCE CERTIFICATE REC-270710-028-RA Level 01

Certificate Reference Number: MAR041 SDLA01

Project title: **Students' intentions and attitudes towards using Information and Communication Technology (ICT) for the purpose of counselling.**

Nature of Project: Masters in Psychology Zikhona

Principal Researcher: Dlaza

Supervisor: Ms R Marais *llence*

Co-supervisor: N/A

On behalf of the University of Fort Hare's Research Ethics Committee (UREC) I hereby give ethical approval in respect of the undertakings contained in the above- mentioned project and research instrument(s). Should any other instruments be used, these require separate authorization. The Researcher may therefore commence with the research as from the date of this certificate, using the reference number indicated above.

Please note that the UREC must be informed immediately of

- Any material change in the conditions or undertakings mentioned in the document
- Any material breaches of ethical undertakings or events that impact upon the ethical conduct of the research

**Special conditions:** Research that includes children as per the official regulations of the act must take the following into account:

Note: The UREC is aware of the provisions of s71 of the National Health Act 61 of 2003 and that matters pertaining to obtaining the Minister's consent are under discussion and remain unresolved. Nonetheless, as was decided at a meeting between the National Health Research Ethics Committee and stakeholders on 6 June 2013, university ethics committees may continue to grant ethical clearance for research involving children without the Minister's consent, provided that the prescripts of the previous rules have been met. This certificate is granted in terms of this agreement.

The UREC retains the right to

- Withdraw or amend this Ethical Clearance Certificate if
  - o Any unethical principal or practices are revealed or suspected
  - o Relevant information has been withheld or misrepresented
  - o Regulatory changes of whatsoever nature so require
  - o The conditions contained in the Certificate have not been adhered to
- Request access to any information or data at any time during the course or after completion of the project.
- In addition to the need to comply with the highest level of ethical conduct principle investigators must report back annually as an evaluation and monitoring mechanism on the progress being made by the research. Such a report must be sent to the Dean of Research's office

The Ethics Committee wished you well in your research.

Yours sincerely



**Professor Lindelwa Majova-Songca**  
**Acting Dean of Research**

08 September 2017

## Annexure: Informed Consent



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Dear Participant

This investigation will be used to fulfil the requirements of Masters in Social Science (Psychology) at the University of Fort Hare by Zikhona Dlaza, student number: **201704716**

The topic of the study is **Students' intentions and attitudes towards using Information and Communication Technology (ICT) for the purpose of counselling.**

Any information that is obtained in connection with this study, and that can be identified with you, will remain confidential. Confidentiality will be maintained by means of using coding procedures. The participants are not required to write their names on the questionnaires.

If you have any questions or concerns about the research, please feel free to contact Zikhona Dlaza (Principal Researcher) on the following phone number: 078 3922 738; email: [dlazazikhona@gmail.com](mailto:dlazazikhona@gmail.com). And my supervisor: Mrs Rivca Marais on email: [rvanheerden@ufh.ac.za](mailto:rvanheerden@ufh.ac.za).

Please tick below if you have read and understood the information provided above, and agree to take part in the study under conditions stated above.

I agree to participate

I do not agree to participate

## Annexure C: Questionnaire

Please indicate with an 'x' on the correct response

1.	Gender	Female	Male			
2.	Ethnic group	Black	Coloured	White	Indian	Other
3.	Age	Below 20 years	20-25 years	26-31 years	Above 32	
4.	Level of study	Level 1	Level 2	Level 3	Level 4	Post-Graduate
5.	Faculty	Humanities & Social Sciences	Management & Commerce	Law	Nursing	Education
6.	Campus	Alice	East London			

Please put a cross in the appropriate block indicating whether you strongly disagree, disagree, neither agree nor disagree, agree or strongly agree with each of the following statements;

		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
	<b>Intentions to seek Psychological Help</b>					
1.	If I believed I was having a mental breakdown, my first inclination would be to get professional help.	1	2	3	4	5
2.	The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.	1	2	3	4	5
3.	There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.	1	2	3	4	5
4.	I would want to get psychological help if I were worried or upset for a long period.	1	2	3	4	5



5.	I might want to have online psychological counselling in the future.	1	2	3	4	5
6.	A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.	1	2	3	4	5
7.	Considering the time and expense involved in psychotherapy, it would be doubtful value for a person like me.	1	2	3	4	5
8.	A person should work out his or her own problems; getting psychological counselling would be a last resort.	1	2	3	4	5
9.	Personal and emotional troubles, like many things, tend to work out themselves.	1	2	3	4	5
<b>Attitudes towards Online Counselling</b>						
10.	Using online counselling would help me learn about myself.	1	2	3	4	5
11.	If a friend had personal problems, I might encourage him or her to consider online counselling.	1	2	3	4	5
12.	I would confide my personal problems with online counsellor.	1	2	3	4	5
13.	It could be worthwhile to discuss my personal problems with an online counsellor.	1	2	3	4	5
18.	If online counselling services were available in my campus I would consider trying it.	1	2	3	4	5
19.	If I were having a personal problem, seeking help with online counsellor would be the last option I would consider.	1	2	3	4	5

20.	I would feel uneasy discussing emotional problems with an online counsellor.	1	2	3	4	5
21.	I would fear explaining my personal problems to an online counsellor.	1	2	3	4	5
22.	I think it would take a major effort for me to schedule to an appointment with an online counsellor.	1	2	3	4	5
23.	I would be afraid to discuss stressful events with an online counsellor.	1	2	3	4	5

Thank for your responses!



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