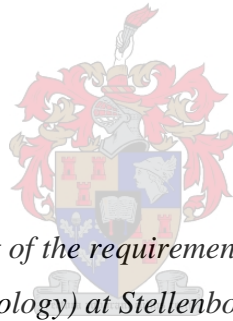


No we don't have WiFi. Talk to each other:
Understanding the dynamics of computer-mediated
communication and its impact on well-being

Andrew Maile



*Thesis presented in fulfilment of the requirements for the degree of Master of
Science (Psychology) at Stellenbosch University.*

Supervised by Dr Chrisma Pretorius

Stellenbosch University

December 2015

Declaration

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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Summary

Computer-mediated communication (CMC) has expanded into an everyday phenomenon whose influence in the way individuals communicate with one another and behave in various social contexts is increasingly being noted. Interest in understanding this phenomenon better is increasing in prominence. With the advancement of mobile phones from tools for basic communication, to devices that allow one to do anything previously limited to Internet enabled computers; these mobile smart-phones and other CMC devices have become the ultimate personal resource for communication and entertainment, allowing access anywhere and at anytime. Although research into this phenomenon is fairly substantial, an understanding of the complexity and dynamics of the use of this media technology, and the social and psychological elements that drive its use, are limited.

The youth are especially acknowledged for embracing the varied functions and social interaction capabilities afforded by CMC. University students are identified as a cohort of particular interest in this regard, due to various factors such as an emphasis on social integration, identity and relationship development, independence, and academic expectations. As such, this thesis sought to explore the lived experiences of university students in relation to the use of CMC in their daily lives. A particular focus of this study was consideration of the link between CMC and the importance of social identification in the university context. A qualitative design was utilised, and 15 students from Stellenbosch University were selected from a combination of purposive and snowball sampling methods. These 15 students, aged between 18 and 25, from various academic disciplines were interviewed using a semi-structured method. Interpretative Phenomenological Analysis (IPA) was employed in analysing the semi-structured interviews, and in generating the emergent themes.

After careful considerations of various theoretical frameworks, the Social Identity Theory (SIT) were identified as a useful theoretical framework through which the interpretation of the findings could be contextualised; and links with the existing literature were established. Herein it was highlighted that the students perceived notions of normative behaviour, and social expectations regarding use of CMC and their identity as a member of the student body, informed many of their practices and social interactions. Central to the adherence of these socially derived norms was a desire to fulfil the fundamental need to belong and to feel accepted in their social

context. Students indicated an internal struggle with the temptation and appeal of using CMC; and in fulfilling academic obligations and engaging in their present surroundings. Highlighted among the appealing aspects of CMC, was its utilisation for selective self-presentation, impression management, maintaining and communicating desired relationships, and the safety it offers in challenging social situations.

Keywords: computer-mediated communication (CMC), university students, social context, identity, self-presentation

Opsomming

Rekenaar-gemedieerde kommunikasie (RGK) het uitgebrei na 'n alledaagse fenomeen waarvan die invloed waarop individue met mekaar kommunikeer in verskeie sosiale kontekste toenemend opgemerk word. Belangstelling om hierdie fenomeen beter te verstaan is toenemend prominent. Met die ontwikkeling van mobiele fone vanaf 'n hulpmiddel vir basiese kommunikasie na 'n toestel wat 'n mens daartoe in staat stel om enigiets te doen wat voorheen beperk was tot rekenaars met Internet toegang; hierdie mobiele slimfone en ander RGK het die verkose persoonlike hulpbron vir kommunikasie en vermaak geword, wat toegang enige plek op enige tyd moontlik maak. Hoewel daar redelik baie navorsing op hierdie gebied gedoen is, is die begrip van die kompleksiteit en dinamiek van die gebruik van hierdie media tegnologie, en die sosiale en psigiese elemente wat die gebruik daarvan aandryf, beperk.

Die jeug word veral herken aan hul aanvaarding van die verskeie funksies en sosiale interaksie vermoëns van RGK. Universiteitstudente word geïdentifiseer as 'n kohort van spesifieke belangstelling hiermee as gevolg van verskeie faktore soos 'n klem op sosiale integrasie, identiteit en verhouding ontwikkeling, onafhanklikheid, en akademiese verwagtinge. Hierdie tesis poog om die belewenis van universiteitsstudente in verhouding met die gebruik van RGK in hul daaglikse lewens te ondersoek. 'n Spesifieke fokus van die studie het die skakel tussen RGK en die belangrikheid van sosiale indentifikasie in die unversiteitskonteks in ondersoek. 'n Kwalitatiewe ontwerp is gebruik en 15 studente van Stellenbosch Universiteit is geselekteer deur gebruik te maak van 'n kombinasie van doelgerigte en sneeubal selektering metodes. Semi-gestruktureerde onderhoude is met hierdie 15 studente, tussen die ouderdom van 18 en 25, van verskeie akademiese dissiplines gevoer. Interpretatiewe fenomenologiese Analise (IFA) is gebruik om die semi-gestruktureerde onderhoude te analiseer en om die ontluikende temas te genereer.

Na deeglike oorweging van verskeie teoretiese raamwerke is die Sosiale Identiteits Teorie (SIT) identifiseer as 'n bruikbare teoretiese raamwerk waardeur die interpretasie van die bevindinge gekontekstualiseer kan word; en skakels met die bestaande literatuur is vasgestel. Hiermee is dit beklemtoom dat die studente neigings van normatiewe gedrag en sosiale verwagtinge na aanleiding van die gebruik van RGK en hul identiteit as 'n lid van die studente liggaam gesien het as grondslag van baie van hul praktyke en sosiale interaksies. Sentraal tot die

nakoming van hierdie sosiaal verrykende norme was die begeerte om te voldoen aan die fundamentele behoefte om te behoort en om aanvaar te voel in hul sosiale konteks. Studente het aangedui dat interne struwelinge met die versoeking en aanloklikheid van die gebruik van RGK, en die voldoening van akademiese verpligtinge en omgang met hul onmiddellige omgewing. Van die aanloklike aspekte van RGK wat beklemtoon is sluit in, die gebruik daarvan vir selektiewe self-voorstelling, indruk bestuur, instandhouding en kommunikasie van gewenste verhoudings, en die veiligheid wat dit bied in uitdagende sosiale situasies.

Sleutelwoorde: rekenaar-gemedieerde kommunikasie (RGK), universiteitstudente, sosiale konteks, identiteit, self-voorstelling

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To my darling sister, Heather Christine Maile, I dedicate this thesis to you.

Contents

Declaration	i
Summary	ii
Opsomming	iii
Acknowledgements	vi
Table of Contents	vii
Chapter 1: Introduction	1
1.1 Introduction	1
1.2 Thesis outline	4
Chapter 2: Literature Review	6
2.1 Introduction	6
2.2 Context	6
2.3 The university environment	7
2.3.1 A population at risk	7
2.3.2 Psychological and developmental challenges faced by students	8
2.4 Computer-Mediated Communication (CMC) defined	9
2.4.1 CMC explained	10
2.4.2 Text Messages	10
2.4.3 Email	11
2.4.4 Instant Messaging	11
2.4.5 Social Networking	11
2.5 On being social	13
2.6 The dynamics of CMC use among students	13
2.6.1 Indirect text-based communication	15

2.6.2 Affordability	15
2.6.3 Asynchronicity.....	16
2.7 CMC use driven by a social motivation	16
2.8 How many friends have you got?.....	17
2.8.1 Relationship maintenance.....	18
2.8.2 Social Capital.....	18
2.9 Impression management.....	19
2.9.1 The imagined audience.....	20
2.10 Self-esteem and self-presentation.....	21
2.11 Social comparison	23
2.11.1 Envy.....	24
2.11.2 Rumination	24
2.12 Constantly connected	25
2.13 The Group Norm.....	27
2.13.1 Time to be alone	28
2.14 Sleep	29
2.15 Anxiety	30
2.16 Mobile phone use while driving.....	31
2.17 Academic ramifications.....	32
2.17.1 Task switching.....	33
2.18 Summary	33
Chapter 3: Theoretical framework	34
3.1 Introduction	34
3.2 Background	34
3.3 Social Identity Theory.....	35

3.4 Summary	38
Chapter 4: Methodology	39
4.1 Introduction	39
4.2 Research rationale	39
4.3 Research question.....	40
4.4 Aims and objectives of the research.....	41
4.5 Research design.....	41
4.6 Sampling.....	41
4.7 Description of participants	43
4.8 Data collection.....	44
4.9 Data Analysis	46
4.9.1 Interpretative Phenomenological Analysis.....	47
4.9.2 The stages of IPA	47
4.10 Maintaining trustworthiness.....	49
4.10.1 Credibility.....	50
4.10.2 Transferability	51
4.10.3 Dependability.....	51
4.10.4 Confirmability	51
4.11 Ethical considerations	53
4.12 Summary	54
Chapter 5: Results.....	56
5.1 Introduction	56
5.2 Overview of themes	56
5.3 Theme 1: Always on my phone.....	57
5.3.1 Your whole life is on your phone	58

5.3.2 It does become a habit / you sort of just get addicted.....	60
5.3.2.1 An addiction to fitting in	61
5.3.2.2 The go-to thing/ whenever I have free time.	63
5.3.2.3 Expected to reply immediately	64
5.3.2.4 You feel left behind if you not connected the whole time.....	66
5.3.3 It's cheap and simple	67
5.4 Theme 2: The image you want to show the world	68
5.4.1 It's very much a comparison	69
5.4.1.1 You try to have a better life	71
5.4.1.2 So people can feel envy/ you want them to want to be you	73
5.4.1.3 When you meet them in person, they're completely different	74
5.4.1.4 Too good to be true.....	75
5.4.2 You feel like you've got to	76
5.4.3 Just letting the world know.....	77
5.4.3.1 Living the moment.....	78
5.4.3.2 Keeping tabs	78
5.4.4 You looking for that attention	79
5.4.4.1 Everyone wants to be heard.....	79
5.5 Theme 3: People feel braver.....	80
5.5.1 When people are on Facebook they feel more anonymous	82
5.5.1.1 People are way more comfortable on their phone	82
5.5.2 They hide behind this screen.	83
5.5.3 There are misunderstandings	84
5.6 Theme 4: A way of escaping.....	85
5.6.1 It's a lot more difficult to talk to people in person	86

5.6.2 Society creates this stigma that it's not okay to be alone	87
5.6.2.1 Everyone in your pocket.....	89
5.6.3 You're not really 'doing life' anymore	89
5.7 Theme 5: A big distraction.....	90
5.7.1 I go on my phone in lectures a lot	91
5.7.1.1 If you are a bit bored/ just to keep yourself entertained	92
5.7.1.2 I just think it's very rude.....	93
5.7.1.3 I end up falling asleep in my lectures	93
5.7.2 It's so easy to get stuck in there.....	94
5.7.3 You just waste time	95
5.7.4 Social media is what I procrastinate with.....	96
5.7.4.1 It's like an OCD thing	96
5.7.5 You have to set boundaries for yourself.....	96
5.8 Summary	98
Chapter 6: Discussion	99
6.1 Introduction	99
6.2 Theme 1: Always on my phone.....	99
6.3 Theme 2: The image you want to show the world	104
6.4 Theme 3: People feel braver.....	108
6.5 Theme 4: A way of escaping.....	110
6.6 Theme 5: A big distraction.....	113
6.7 Summary	117
Chapter 7: Conclusion.....	118
7.1 Limitations	118
7.2 Recommendations for future research.....	119

7.3 Conclusion.....	120
References.....	123
List of Appendices	140
Appendix A: Ethical approval.....	141
Appendix B: Institutional permission	142
Appendix C: Informed consent form	143
Appendix D: Interview schedule.....	147
Appendix E: Table 5.6, Theme overview	151
Appendix F: Proof of external editing	153
Appendix G: Example of Transcript and Analysis	154
Appendix H: Participant reflections and profiles.....	155
Appendix I: Turnitin report.....	167

List of Tables

Table 4.1 Demographic information of participants.....	44
Table 5.1 Overview of the first theme, with the primary and secondary sub-theme components	57
Table 5.2 Overview of the second theme, with the primary and secondary sub-theme components	68
Table 5.3 Overview of the third theme, with the primary and secondary sub-theme components....	80
Table 5.3 Overview of the fourth theme, with the primary and secondary sub-theme components..	85
Table 5.5 Overview of the fifth theme, with the primary and secondary sub-theme components....	90
Table 5.6 Overview of the themes.....	151

Chapter 1: Introduction

1.1 Introduction

Advancement in media technology has seen substantial changes in the various functions, facilities and opportunities for exploration of information and knowledge generation, entertainment and communication (Kimmons & Veletsianos, 2014; Uys et al., 2012). One merely needs to look at the extent of this advancement with the mobile phone; a tool formerly used for telephonic communication and the sending and receiving of text messages (or short message services, SMS), which was revolutionary in and of itself (Uys et al., 2012). Yet the mobile phone we know today has almost unlimited capabilities (Brown, 2013; Rosen, 2012; Uys et al., 2012). Communication and entertainment advances are not only limited to the mobile phone, but are also evident with the technological and internet-enabled evolution of computers, laptops and the introduction of the tablet (Rosen, 2012). This technological evolution has been further facilitated with the development and increased availability of access to wireless networks, or WiFi (Rosen, 2012).

This vast array of new media, software and technology, have changed the way people spend their time, entertain themselves, and connect with others; ultimately turning them into masters of multitasking (Rosen, 2012). Accordingly, the growth of information technologies has altered the ways in which individuals go about their daily lives, and have substantially changed interpersonal communication patterns. With the availability of instant messaging, social networking, texting and email, and the normalisation and popularisation of their use, it is possible to remain constantly connected to one's peers, without seeing them face-to-face (FTF) or directly speaking for substantial periods of time (Brown, 2013).

Computer-mediated communication (CMC) serves as an all inclusive term for the vast array of software applications and functions that are enabled on mobile phones, laptops, computers and tablets (Brown, 2013; Nitzburg & Farber, 2013; Reinecke & Trepte, 2014). A momentous shift in individuals social behaviour and communication patterns, driven largely by the advances in CMC and the extent to which it has been adopted, has emerged swiftly and decisively (Murdock, 2013). CMC is now considered to be a dominant element in the social landscape of various cohorts of people throughout various cultural and economic institutions, among different age groups, and in different countries around the world (Drouin, Vogel, Surbey & Stills, 2013; Rosen, 2012).

The presence of media technology in the daily lives of university students is indisputably evident when casual observation of a university campus is made. Accordingly, substantial research efforts have been undertaken to investigate the use of CMC among this population of emerging adults (e.g. Brown, 2013; Ellison, Steinfield & Lampe, 2007; Kimmons & Veletsianos, 2014; Murdock, 2013; Nitzburg & Farber, 2013; Uys et al., 2012; Walther, 2007; Young & Strelitz, 2014). In recent years, the way this population connect with one another has undergone a paradigm shift (Nitzburg & Farber, 2013), and there is increased interest in the potential impact this apparent dependence on CMC may have on psychological well-being (Niemz, Griffiths & Banyard, 2005) and its association with individuals social identity (Kimmons & Veletsianos, 2014; Walther, 2007). University students are specifically recognised as the most dominant users of CMC (Christakis, Moreno, Jelenchick, Myaing & Zou, 2011; Drouin & Langraff, 2012; Rosen, 2012) and are especially susceptible to using it excessively (Christakis et al., 2011). The use of CMC, among university students may facilitate in enhanced adjustment to an environment and social context different to that found at home or in high school. In this regard it has the potential to reshape social networks, and the ways in which students develop their identity, interact and build relationships with one another (Young & Strelitz, 2014).

Not only has the dawn of the smart phone revolutionised our communication behaviours, but it has never been more visible than it is now (Rosen, 2012). No longer are these devices kept in handbags or pockets, they are sitting on the table, screen-side up, during mealtimes; and they are kept on bedside tables while we sleep. Rosen (2012) refers to it as the “wireless mobile device” (p.47), and suggests that it has become an obsession for many. Furthermore, daily use of CMC and the Internet has fundamentally shifted from interactions anonymous in nature, to a complete or semi-public extension of one’s daily life (Kimmons & Veletianos, 2014). Prevalence of CMC and continuous interaction via social media has played a pivotal role in the need to develop a new understanding of interpersonal behaviour and how individuals communicate with one another (Niemz et al., 2005).

Numerous researchers and individuals alike, are thankful for these technological innovations and advancements, the benefits of which include ease in the development and maintenance of relationships, and the expansion of social networks; allowing individuals to remain permanently connected and in contact with one another no matter where in the world they are (Brown, 2013). Furthermore, these new technologies facilitate our communication, making interactions with others faster and easier, allowing for interaction with many distinct

individuals at the same time (Turkle, 2012). Additionally, there are technological affordances (i.e. CMC enabled tools and/ or mechanisms) that allow individuals to better manage their self-presentation and the impressions they make on other people (Reid & Reid, 2010; Walther, 2007).

However, as CMC is progressively diffusing into our culture and the daily functioning and social environments of individuals, it is increasingly apparent that the positive outcomes of CMC are met with just as many negative ones (Brown, 2013; Drouin & Langraff, 2012). Among these negative considerations for students is increased loneliness (Young & Strelitz, 2014); it follows that if individuals are spending a substantial amount of time occupying themselves and interacting via CMC, the less time they will spend in the presence of, and directly communicating with, their peers and family (Brown, 2013; Young & Strelitz, 2014). Further negative outcomes include sleep deprivation (Murdock, 2013; Thomée, 2012), lack of quiet time spent for thought or contemplation (Shapiro & Margolin, 2013; Turkle, 2012), and negative academic consequences (Cao, Sun, Wan, Hao & Tao, 2011; Lin, Ku & Wu, 2011; Rosen, Carrier & Cheaver, 2013; Shapiro & Margolin, 2013).

Whether the positive outcomes of the progressive diffusion of CMC into society outweighs the negative aspects, is not of primary concern for this research; however, it is becoming increasingly evident that an individual's interaction with CMC can affect numerous facets of one's social, physical and psychological well-being (Kalpidou, Costin & Morris, 2011; Rosen, 2012). The purpose of this study is to develop an understanding of CMC use in the student population, and what drives its popularity and marked prevalence, by exploring the lived experiences of a sample of university students.

By exploring students experiences of CMC use, and how it is linked to their identity as a student, will facilitate in developing a better understanding of the prevalence of and preference for CMC. A desire of this research is to gain insider perspective as to why students are so frequently observed interacting with, and occupying their time on, a mobile CMC device. The social and personal factors that drive the complex dynamics of CMC use, and the benefits derived from its use are of additional interest in the present study. Although research among the student population has been conducted in a similar quantitative vein, this research seeks to contribute to the existing literature by considering CMC as a whole, and not separating it into its separate components. By considering CMC in its multitude will help in understand the collective incorporation of CMC in one's life, so that a broader perspective

and understanding is gained. Furthermore, research of this phenomenon is limited in the South African context, and quantitative research has been favoured over qualitative research; this study aims to fill these gaps (Young & Strelitz, 2014). Indeed, through the exploration of individuals' lived experiences of CMC, the present research aims to contribute in understanding this phenomenon better, and providing insight as to how it may impinge on the daily functioning and well-being of students.

1.2 Thesis Outline

This first chapter served to introduce the broader scope of the research, providing a picture for the importance of this research, and to introduce the literature review which follows in the second chapter.

The second chapter is a review of the existent research related to the use of CMC in the student population. The use of CMC will be explained in the context of its use in the university environment and by the student population, including developmental challenges. Thereafter an overview of CMC, with definitions for its various components will be provided. The dynamics of its use and significance in a social context will then be considered, and the potential benefits and detriments of its use will close the chapter.

Use of the Social Identity Theory (Hogg & Abrams, 1999) as the theoretical framework, or lens through which the results will be interpreted, will be explained in the third chapter. This chapter will provide a background to the theoretical framework, and an explanation for its applicability in this study.

The fourth chapter will comprise an outline of the research methodology that was used in the present study. The rationale for the research, and the research question, aims and design will be included. Thereafter the sampling methodology used, a description of the participants and a table providing the participants demographic information will be provided. The data collection and analysis processes are then discussed. Lastly, the methods made use of to ensure the trustworthiness of the study, and any significant ethical considerations, will be considered.

The emergent findings and results of the present study will be presented in the fifth Chapter. This chapter will include the main themes and sub-themes that emerged through the

use of Interpretative Phenomenological Analysis of each of the interviews, reflecting the lived experiences of student's use of CMC. Direct quotes from the interview transcripts will be used throughout.

The sixth chapter will comprise a discussion of the key findings that were presented in the results section, and the discussion will be structured according to the five main themes that emerged. The Social Identity Theory (Hogg & Abrams, 1999) will be used to contextualise and interpret the findings. Furthermore the findings will be related to the existing literature of CMC use by students, in order to establish associations between international and local findings, as well as links between the present study and those that are quantitative in nature, or limited to individual CMC elements.

Lastly, the seventh chapter will provide a conclusion of the study, highlighting its significance and the contribution it has made to the field. This chapter will close with consideration of the limitations of the study, and recommendations for future research will be proposed.

Chapter 2: Literature Review

We walk through this world with our heads down. Immersed in the technological realm, we disregard the real. We converse with our hands rather than our mouths, tapping keyboards and touchpads to the rhythm of our thoughts. This is the way we communicate in the 21st century.

Brown (2013)

2.1 Introduction

This chapter comprises a review of the current literature related to Computer-Mediated Communication (CMC), from various academic disciplines including Psychology and Sociology. An initial introduction to the environment and context of the university is provided as support for the rationale and motivation for focusing on this specific population. Following this is an explanation of CMC in order to provide a foundation upon which an understanding can further be developed. Included in this explanation is a definition of each of the primary CMC devices typically used by university students. Subsequently, the dynamics of CMC use among students is explored and the impact of CMC in their daily lives is discussed. Lastly, consideration of the potential problematic outcomes that may result from excess CMC use in relation to students will close the chapter.

2.2 Context

In this landscape of rapidly changing interpersonal communication, the increasing use of mobile technologies can valuably be used both to sustain and establish social relationships (Drouin & Langraff, 2012; Pettigrew, 2009; Reid & Reid, 2008). Forging and sustaining relationships would traditionally have occurred by means of face-to-face (FTF) or verbal communication, but with the advent and growth in popularity of text and instant messaging, Social Networking Services (SNS), and other CMC, it has become increasingly popular for people to navigate these relationships via a screen (Drouin & Langraff, 2012); this has been noted among young adults in particular.

To the benefit or detriment of our well-being, the Internet has been “woven into the fabric” of our daily lives (Christakis, Moreno, Jelenchick, Myaing & Zhou, 2011, p.2) and this certainly rings true for all the ubiquitous forms of ‘on-screen’ online communication, like CMC. As such, individuals are constantly barraged by status updates, photos and instant

messaging (Feinstein, Bhatia, Hershenberg & Davila, 2012; Nitzburg & Farber, 2013); moreover, they are actively checking for these updates and eagerly anticipating them (Rosen, 2012).

Rosen (2012) states that one no longer even deliberates (or thinks twice) about taking out one's CMC device in a social situation (indeed, it is already likely to be right next to them) and responding to a text or 'post' while actively engaging in conversation with others. He goes on to add that there seems to be an apparent lack of the common practices guided by etiquette, all abandoned for the sake of constantly being connected to others (Rosen, 2012). Indeed, the behaviour reported in research (Atchley & Warden, 2012) and observed in daily practices certainly indicates support of this statement.

2.3 The university environment

As students are the focus of this study, the context in which they live is an important area of consideration. The University environment is one in which a diverse group of adolescents and young adults, from a variety of locations, come together. As such, it provides a platform in which students join in the pursuit of common interests and goals. While differences may exist in their accommodation, classes selected, and societies or clubs joined, all students are tied to a common campus life. As such, students are exposed to a common campus culture in which they are socialised (Rabow & Duncan-Schill, 2001). A predominant element of this environment, and issue of significant importance among students, is socialising. A prominent element of socialisation in the present student context is that which occurs via the computer screen, mobile phone or tablet (Manago, Taylor & Greenfield, 2012; Rosen, 2012). CMC is often viewed as a kind of social glue, assisting students in establishing connections, building social capital and adjusting to university life (Kalpidou et al., 2011; Lee, 2013).

2.3.1 A population at risk

There is a substantial indication in research surrounding the use of CMC that the heaviest and most frequent users identified are adolescents and young adults (Christakis et al., 2011; Drouin & Langraff, 2012; Rosen, 2012). Individuals between 18 and 25 years of age are, according to Arnett (2000), distinguished as "emerging adults". Emerging adulthood

is the period between adolescence and adulthood, and is typically the age category in which most undergraduate students would fall. Thus, according to the aim of this study, the population of focus were individuals that fall within this criterion. It has thus been applied in the methodology of the study (that is, participant recruitment) and in the literature review.

Another aspect which identifies young adults as an interesting research group is their high potential risk for behavioural addictions (Christakis et al., 2011; Grant, Potenza, Weinstein & Gorelick, 2010). If one is to look at a contingent where adolescents and young adults meet, and indeed where a transition from the latter to the former occurs, the university environment is an ideal choice. Larry Rosen (2012) states that the university aged cohort are particularly “obsessed with keeping constant tabs on the two most important connection vehicles in their lives – text messages and Facebook – and they do so with a vengeance” (p.14).

It is indeed further indicated that the unique environmental factors and psychological experiences to which university students are exposed make them specifically vulnerable to engage in problematic Internet use (Hall & Parsons, 2001). Additional support is found by Christakis et al. (2011), stating that university students are especially susceptible to excess use of CMC due to their independent time management and because they have largely unrestrained and unsupervised access to the Internet. In recognition of this, and no doubt due to the fact that students have been the primary focus for much of CMC design and intentional use, a significant proportion of research conducted on this phenomenon has made use of student populations. Indeed, the creation of the most popular Social Networking Site (SNS), Facebook, was specifically to make connections between students on the same campus. The majority of literature that is herein reviewed and analysed shall, as such, make frequent reference to adolescents, young adults, and university students.

2.3.2 Psychological and developmental challenges faced by students

Trials that students might face in the light of their new social and physical context include, among others, the substantial challenge of identity development and the establishment of intimate relationships (Niemz et al., 2005). As such, developing one’s perception of identity, becoming independent, selecting majors, choosing a career path, gaining peer acceptance, and finding and establishing intimate or romantic relationships are all tasks a student has to face (Niemz et al., 2005).

According to numerous researchers, the adolescent student population is particularly at risk for the development of Internet addiction (Katalapudi, Chellappan, Montgomery, Wunsch & Lutzen, 2012; Kuss et al., 2013; Lin, Ko & Wu, 2011). The risk in this regard is due to developmental variability in students' setting of boundaries and their cognitive control. Additionally, students typically appear to have an affinity to engage in regular media and Internet use. In fact, students are often expected to make use of the Internet and technology for academic purposes. Their easy and unlimited access to the Internet, freedom to do what they like without parental monitoring, and flexible timetables, enables them to spend excessive amounts of time on online communication and Internet surfing activities in addition to their use of it for academic purposes (Kuss et al., 2013).

The university setting can be one in which strong feelings of social isolation, alienation and intimidation are evoked. As such, use of the Internet to appease these feelings may contribute to its allure (Kuss et al., 2013; Young, 2004). The Internet may further facilitate a student in other psychological and developmental challenges. Indeed, use of the Internet on university campuses has seen a dramatic increase, and is now considered to play a fundamentally important role in student life (Lin et al., 2011). As one makes the transition to university, they face numerous stress factors in their new context: lacking the social system, which they previously made substantial use of, is one such stressor. In this regard it is found that students particularly are at a high risk of experiencing loneliness (Lou, Yan, Nickerson & McMorris, 2012).

2.4 Computer-Mediated Communication (CMC) defined

In the last decade and a half, the way in which humans communicate and interact has been dramatically changed by the substantial advances in communication technology (Brown, 2013). The choice between contacting someone via email, text message, Facebook, Whatsapp, Skype and so on, illustrates the vast resources individuals have at their disposal. So vast and so normal are these means of communication, that the popularity and regularity of their use indicates that they are often a first port of call.

While there is certainly a vast amount of research emerging in regard to the numerous technologically advanced ways in which individuals can communicate with one another, most studies have focused on individual, particular elements of CMC. Such elements include the

Social Networking Sites (SNS) Facebook and Twitter (e.g. McKinney et al., 2012; Nitzburg & Farber, 2013), Internet use (e.g. Christakis et al., 2011), and mobile phone use including text messaging and Instant Messaging (e.g. Thomée, Harenstam & Hagberg, 2011).

Valuable information has, and indeed can be, gained by focusing specifically on individual elements of CMC and how they are used or misused; however, the dawn of the smart phone has seen all of these elements combined into one unit. Smart phones are equipped with the essential components of the basic mobile phone, but are also linked to the Internet and provide quick and easy access to SNS, email, games, news, weather reports and multiple other applications (Brown, 2013). Their visually appealing design and ease of use is particularly alluring and inherently results in greater time consumption (Brown, 2013; Rosen, 2012). Rosen (2012) further states that these devices – always seen in the hand or near proximity of their owners – allow one to do anything a computer with access to the Internet would permit and is thus “the ultimate personal resource that allows 24/7 access wherever and whenever” (p.72).

Therefore, one is essentially now able to use their mobile phone (smart phone) for the same variety of online, non-verbal communication (mostly) that they would be able to access and engage in on a personal computer (at home, work or university), laptop, or tablet. Thus by limiting research to a particular element of CMC, one does not adequately grasp the extent to which individuals are connecting or communicating through means of a computer screen. It is indeed not uncommon for individuals to participate in “task switching” (Rosen, 2012), the act of constantly checking in with all of a number of communication tools available to them. Thus by including all these elements under the collective term of CMC, it is easier to grasp their collective involvement in our daily lives.

2.4.1 CMC explained

This section of the literature review will focus on providing an explanation of the different types of CMC that are popularly used; and that have been the focus of research undertakings in the emerging adult population.

2.4.2 Text Messages

A text message, Short Message Service (SMS), or text, is a brief, electronic message that is typed on a mobile phone and sent to another mobile phone (typically belonging to an acquaintance or close friend), and is now a very common and conventional method of

communication (Pettigrew, 2008). According to Bullas (2012), people worldwide whom reported having a mobile phone numbered 48 billion, with 77% of American adolescents having their own (Tippin 2012). Of adolescents with mobile phones, 72% reported sending text messages with an average of 3000 messages sent each month (Lenhart, Ling, Campbell & Purcell, 2010; Drouin & Langraff, 2012). Thus it is not surprising that text messages have become an essential part of the lives of many young adults and are inevitably involved in their interpersonal relationship interactions (Pettigrew, 2008).

2.4.3 Email

The term 'Email' typically refers to the exchange of typed messages between individuals, which are accessed on computers or mobile phones; emails began at the same time as the Internet (Brown, 2013; Vleck, 2012). It was originally considered common practice for distanced family and friends to keep in contact by means of email, although nowadays it is mostly used for more formal or professional means of communication. According to research by Radicati (2012), individuals around the world who had at least one email address (or email account) numbered 3.3 billion and, several years on, it can only be assumed that this number has increased.

2.4.4 Instant Messaging

Instant messaging is not dissimilar to the SMS in that it enables individuals to engage in text-based communication. However, IM requires a user to have an online connection, using WiFi or phone data. And may be accessed on smart phones, tablets or computers. Further, it was developed as a synchronous or real-time means of communication. There are various applications and sources for IM. For instance, most email accounts have the option for an IM to be sent to a contact who is online; Facebook also provides users with this option. The most popular types of IM mentioned in this study were Whatsapp, BlackBerry Messenger (BBM) and Facebook Chat – now, Facebook Messenger (Wiseman, 2008).

2.4.5 Social Networking

The SNS is currently the most popular activity that people engage with online. The SNS was developed based on the notion that individuals can connect with others and establish deep and meaningful online communities (Brown, 2013). The most widely researched and used SNS, Facebook, was created in 2004. In 2007 the most popular SNS was Myspace, who made use of the SNS to share photographs, music and videos with friends (or

online connections). Facebook was originally available exclusively to university students; however, it was later made accessible to a far broader spectrum of individuals, and grew exponentially in its popularity to become the largest used SNS worldwide. As of September 2014 Facebook had over 1.35 billion active monthly users (Facebook, 2014; Fardouly, 2015). The second most popular SNS after Facebook is Twitter, – an “information network” allowing one to connect with people and express themselves with words, photos, videos and links – has 284 million active monthly users with an average of 500 million Tweets sent each day (see <https://about.twitter.com/company>; McKinney et al., 2012). Other SNS worthy of mention in this research context are Instagram (2010) and LinkedIn (2003).

The number of different SNSs available, the audience they appeal to, and attributes and functions they offer are substantially vast. The general features of the broad range of popular SNSs are

- that they enable self-presentation, either in the form of photographs, written information, or through the sharing of locations visited and links to articles or websites,
- that one can establish and maintain social connections with others, and
- it allows individuals to “articulate their social networks” (Ellison et al., 2007, p.1143; Young & Strelitz, 2014).

Additionally, SNSs are typically oriented towards different contexts or outcomes. For example: LinkedIn promotes work and skill-related networking; Friendster (among numerous other dating sites) and apps such as Tinder are intended for the establishment of romantic relationships; MySpace creates an environment for the sharing of interests, such as music genres; the connecting of groups from similar communities have seen the rise of sites like Facebook, which was originally created to connect student populations (Ellison et al., 2007).

The abovementioned SNSs barely scratch the surface of CMC applications and SNSs available. Joel Stein (2013) made reference to the “quantified self”, a term particularly apt at describing the interaction and disclosure behaviours a vast number of young adults engage in: from recording their exact location “every hour of every day” (p.30) on PlaceMe, Facebook or Twitter, their daily exercise routine on FitBit, photographs of their morning cappuccino or home-made sandwich on Instagram, to their genetic specifics on 23 and Me (Stein, 2013). It thus becomes clear that, not only is there an overwhelming volume of choice in CMC

applications, they are time consuming and, if not used as a means of maintaining relationships, they can become a focused obsession on the self or the ‘following’ of others (McKinney et al., 2012; Rosen, 2012).

2.5 On being social

Interpersonal relationships and friendship formation are widely acknowledged as pivotal elements to sound development and well-being (Buote, Wood & Pratt, 2009; Greenwood, Long & Dal Cin, 2013; Helliwell & Putnam, 2004). People are inherently social beings, whose identities are bound to different qualities, ideas, groups of people and situations (Livingstone, 2008; Rosen, 2012). As mentioned above, university students are at an essential phase of independent socialisation, and are particularly influenced by their peers and their desire to belong (Gangadharbatla, 2008; Greenwood et al., 2013). The Social Identity Theory (Hogg & Abrams, 1999; Postmes, Spears & Lea, 1999; Terry, Hogg & Duck, 1999) proposes that an individual’s desire to belong directs one to think and act in accordance with the social norms and values of the group with which one identifies. Additionally, according to Bandura’s Social Learning Theory, observation of others’ positively and negatively reinforced behaviours provides another means of socialisation.

2.6 The dynamics of CMC use among students

The following section will provide a focussed review of the literature to facilitate an understanding of how students interact with CMC, and the impact that it has in their daily functioning and the fulfilment of their student roles. Throughout this section, the term CMC will be used wherever the information refers broadly to all that can be accessed on a smart phone or a computer.

Emerging adults’ frequent use of CMC is a widely-acknowledged social phenomenon that has seen rapid growth in recent years. Naturally, this has enabled individuals to remain extensively connected, even while participating in other tasks, such as taking public transport, walking from one class to another or while seated at a café (Green, 2002; Pettigrew 2008; Rettie, 2005). Not only has it become an integral element of social life, but as a form of communication that can be accessed almost continuously, it is very possible that it may affect

one's psychosocial functioning in a number of interesting and mostly unexplored ways (Murdock, 2013).

This rapid growth in the popularity of CMC is in part due to the emergence of advanced technology and greater affordability (Skierkowski & Wood, 2012). Indeed, the presence of full keyboards, touch screens, high quality cameras and advanced word and multimedia processors have facilitated young people in embracing the mobile smart phone "as a hallmark of their generation" (Skierkowski & Wood, 2012, pg 744). If one merely makes a casual observation of the use of mobile phones among adolescents, it becomes clear that they have "permeated almost every facet of interpersonal interaction in an apparent melding of humanity and technology" (Skierkowski & Wood, 2012, pg 744). Furthermore, it has been described as one of the components of "digital sociality": the interdependent and ever-present network of human-technology interaction that has changed the fundamental nature of communication (Murdock, 2013).

Typically, most adolescents and young adults indicate a preference for online communication mediated through a screen as compared to directly conversing over the telephone (Conti-Ramsden, Durkin & Simkin, 2010). Conti-Ramsden et al. (2010) expanded the research on CMC by identifying several dominant aspects that underlie the huge appeal of CMC behaviours among adolescents. As such, they were able to shed light on the inherent advantages this form of communication offers and to begin to understand why it is so popular. Factors including the convenience and affordability of the medium, one's ability to control the context of the communication and convey information, news or gossip rapidly were highlighted. Additionally, the fact that autonomy from parents can be gained and that one is able to maintain privacy from people in their vicinity, were also important (Pettigrew, 2009; Skierkowski & Wood, 2012).

Such insight makes it quite easy to understand why CMC is so appealing (Conti-Ramsden et al., 2010; Skierkowski & Wood, 2012). According to Walsh, White and Young (2009), CMC has in fact become a fundamental component of young people's daily communicative behaviours and "is the preferred means of contact" (Skierkowski & Wood, 2012, p. 746). Support for this preference is due to its indirect text-based communication style, affordability and asynchronicity (Igarashi, Motoyoshi, Takai & Yoshida, 2008; Lu et al., 2012).

2.6.1 Indirect text-based communication

Evidence suggests that adolescents and young adults have a strong desire for establishing close relationships and frequently experience anxiety and challenges in different FTF situations, as well as a fear of failure to communicate in desirable and effective ways (Lu et al., 2012). As such, individuals may prefer to communicate indirectly via text messages so as to moderate or avoid the obstacles which FTF situations may present and alleviate the associated social pressures (Hansen, Fabriz & Stehle, 2015; Skierkowski & Wood, 2012). If indeed this is the case, it is likely that text messaging or other forms of indirect communication would take precedence over FTF communication, and as a result individuals would be highly dependent on their mobile phones. Thus, CMC may consequently be used in a compulsive way and it can be expected that such use could be associated with various psychological and behavioural symptoms (Lu et al., 2012; Rosen, 2012).

2.6.2 Affordability

A fundamental element in consideration of the popular communication tool is a recognition of the fact that very little cost is involved in its use. Indeed many researchers attribute much of its popularity and usage due an increasing affordability of purchasing CMC devices and making use of various CMC options (Aggarwal, 2011; Hansen et al., 2015; Skierkowski & Wood, 2012). One merely has to peruse the various popular CMC websites, such as Whatsapp, Instagram, Twitter, Facebook and LinkedIn, to verify that it either has no cost to join or is at most inexpensive. For example, Whatsapp is free for the first year of subscription, and thereafter costs \$0.99 USD; Facebook, Instagram, LinkedIn and Twitter, to name a few, have no subscription or usage costs other than data or Internet tariffs. In this regard it is important to note that many restaurants, coffee shops or commercial properties offer free WiFi. Lastly, Universities typically have widely available Internet access across campus, with minimal expense (Kuss et al., 2013).

2.6.3 Asynchronicity

The asynchronous style of communication that is afforded by CMC, allows individuals the opportunity and the time to think through the content of the text and reflect on appropriate

responses before replying (Burke & Ruppel, 2014; Skierkowski & Wood, 2012). In this regard, one is able to take care in planning and editing the content of their message before they send it (Pettigrew, 2009). In addition, one is able to engage in multiple conversations with different individuals simultaneously, without the threat of disruption or having to limit oneself to a single conversation/interaction (Kim et al., 2007).

2.7 CMC use driven by a social motivation

It is noted that, as a result of the numerous positive perceptions and advantageous outcomes of CMC, there is a social motivation for people to continue communicating with peers via this medium. Walsh et al. (2009) provided valuable, qualitative data in understanding the motives for CMC among young people in Australia. Their results provide further support for the social motivation of mobile phone use. Results indicated that individuals who engaged in this form of communication were likely to receive positive rewards in “feelings of belongingness” (p745) among their peers (Skierkowski & Wood, 2012). It was furthermore indicated that it is in fact the established group norms which moderate and influence young adults CMC behaviour (Skierkowski & Wood, 2012).

CMC, with its numerous and versatile capacities, enables individuals to foster connections and shape interpersonal interactions (Murdock, 2013; Pettigrew, 2008). In line with such advantages, it can allow one to establish affection and intimacy in their relationships and can also allow one to find a sense of belonging in their social sphere (Coyne, Stockdale, Busby, Iverson & Grant, 2011). This sense of belongingness emerged as an important aspect of users’ experience of CMC behaviour, and also facilitated in the development of adolescents’ social identity (Skierkowski & Wood, 2012). A sense of belonging is promoted by frequent connection with one’s peers, which can be achieved by regularly checking one’s mobile phone and preferably keeping it on at all times (Skierkowski & Wood, 2012; Walsh et al., 2009). Results further indicated that when adolescents are in regular contact with one another via CMC, feelings of being loved and valued are fostered, as well as being seen as popular and well-liked in their peer network. Adolescents who failed to comply with the established group norms of always being available and responsive via CMC reported that they felt ostracized by their peers and pressured to conform to the group norms (Igarashi et al., 2008; Skierkowski & Wood, 2012).

Thus when youth comply with the socially-approved behavioural norms, they are likely to experience a boost to their sense of belonging, which is likely to impact positively on their self-esteem (Ellemers, Barreto & Spears, 1999; Valkenburg & Peter, 2009a,b). Self-esteem is also further enhanced when the pressure of FTF communication is removed and the context and content of the communication can be controlled. An activity, such as that of texting, in which one's perception of self-esteem can be enhanced, is likely to have an ultimate impact or effect on the formation of one's social identity (Skierkowski & Wood, 2012). A social identity formed in such a manner is going to be entrenched in the very communicative processes that were initially involved in establishing those feelings of belonging (Skierkowski & Wood, 2012). Consequently, texting will (and does) become an important component of how one experiences the self, and social identity, in the presence of others. Thus, not only has this form of communication behaviour been identified as a preference among adolescents (Skierkowski & Wood, 2012) but has actually been linked to their identity and how they perceive their sense of self (Skierkowski & Wood, 2012).

2.8 How many friends have you got?

Research has supported that impaired social functioning may result from a lack of genuine FTF social interaction and an overreliance of CMC online relationships (Huang, 2010). Online 'friendships', without additional FTF contact, are frequently superficial and can lack the necessary feelings of commitment and affection. As such, certain researchers are of the opinion that friendships merely maintained through CMC are of reduced quality and may consequently impact on well-being (Huang, 2010; Valkenburg & Peter, 2007).

It is furthermore interesting to note that the growth of online social networks occurs at a much faster rate than those established in "real life" offline social networks. With the average "real life" social network estimated to average 125 connections or contacts, individuals frequently have more than double this amount of contacts as "friends" on Facebook (Chou & Edge, 2012) and may have as many as 5000. Research conducted by Steinfield, Ellison and Lampe (2008) indicated that the mean number of students Facebook friends increased by 50%, from 223 in 2006 to 339 in 2007; and according to Statista.com, the current average number of facebook friends among US adolescents aged 18-24 is 649. Evidently this is an overwhelming number of people for one individual to remain closely

connected to; thus providing support for Facebook being a medium that enables the collection of a large number of shallow, superficial connections (Steinfeld et al., 2008).

2.8.1 Relationship maintenance

As has been previously mentioned, numerous opinions regarding popular use of SNSs have been fairly critical (große Deters & Mehl, 2012) and concerns regarding interpersonal and psychological effects have been raised. However, several findings have also indicated that benefits of social capital, support and reductions in loneliness are to be gained (Lou et al., 2012).

According to Gardner, Pickett and Knowles (2005), Facebook can be used as a means of “social snacking” which can be described as activities including browsing photographs or rereading dated emails or old wall-posts (große Deters & Mehl, 2012). Such behaviours are symbolic of social interactions and connections and can as such relieve feelings of loneliness by reminding one of their bonds of friendships and social connection.

On the contrary, it has in fact been suggested that the ease with which SNSs are accessed and the lack of substantial effort required to communicate via CMC mediums, may result in a reduction in intimacy (Bazarova, 2012). Essentially, what is produced without effort, namely public disclosure and publicised interactions, has less value and is less appreciated. As such, it can be surmised that public exchanges that occur through Facebook are less likely to establish feelings of bonding and intimacy (Bazarova, 2012). However, this seems to undermine the potential value that publicly-acknowledged friendship exchanges may have with regards to popularity and social capital.

2.8.2 Social Capital

The term ‘social capital’ has been commonly used in reference to the benefits that one stands to gain from peer relationships and considers the importance for social inclusion among one’s peers. According to Lee (2013), social capital is gained from an individual’s broader social network and may be conceptualised as the potential (or actual) resources which one has access to, due to their investment in that relationship. The fundamental tenet of social capital is that there is value to be gained from the accumulation (and maintenance) of relationships with others (Ellison et al, 2007; Lee, 2013). Accordingly, the more resources that one has access to, the greater the social capital they will be perceived as having.

Not only does publicised social network interactions serve to bolster social capital, but the inherent structure, design and purpose of SNSs such as Facebook is intended to establish, maintain and share one's social connections (Ellison et al., 2007; Steinfield et al., 2008). Peer relationships are an important component of young adults' psychological development and additionally afford numerous benefits in the offline realm (Steinfield et al., 2008). It has furthermore been noted that a relationship between well-being and social capital exists, such that students with higher social capital also report increased satisfaction with university life and higher levels of self-esteem (Ellison et al., 2007; Valkenburg & Peter, 2009a,b). Social capital is also beneficial in that it provides increased awareness of activities on campus, general information and opportunities for interaction. It is thus understood that SNS use, particularly that of Facebook, assists students in gaining a rich university experience. One such element which individuals utilise in building well-networked social ties among their peers is by establishing a favourable impression of themselves. In order to facilitate the building and maintaining of social connections, individuals may make use of self-presentation methods that will bolster how they appear to others that stems from a desire to be liked.

2.9 Impression management

Generally speaking, people are particularly concerned about the impressions others have of them (Livingstone & Brake, 2010; Rosen, 2012). As such, one is therefore constantly trying to manage these impressions by portraying themselves and their activities in as favourable a light as possible (Chou & Edge, 2012; Manago, Graham, Greenfield & Salimkhan, 2008; Midgley, 2013; Utz, Tanis & Vermeulen, 2012). CMC mediums in general are particularly attractive from the point of view that they enable one to use numerous techniques to "optimise their self-presentation and promote desired relationships" (Chou & Edge, 2012, p.117). Such methods include being able to carefully select and edit photographs, make use of time, cognitive resources and reflection to edit messages, make witty or charming comments and highlight one's positive attributes (Ahn, 2011; Gonzales & Hancock, 2011; Liu, 2008; Midgley, 2013; Nadkarni & Hofmann, 2012). Furthermore, one can have deeper self-disclosure, manage their language style, and associate themselves exclusively with certain people, or desirable material or symbolic objects. Ultimately, this allows individuals to present an image of their ideal self so as to convey more favourable

impressions of themselves to others (Chou & Edge, 2012; Manago et al., 2008; Manago, Ward, Lemm, Reed & Seabrook, 2014; Haferkamp et al., 2012; Utz, Tanis & Vermeulen).

On Facebook, people are typically motivated to present themselves positively, and as such, Facebook friends tend only to present socially desirable images and information. Although it is uncommon for false information to be put online, negative emotions are commonly considered as taboo (Midgley, 2013). As such, individuals highlight their accomplishments and overemphasize their achievements, shifting the focus away from their negative traits (Krasnova, Wenninger, Widjaja, & Buxmann, 2013; Toma & Hancock, 2013). Selective self-presentation is afforded by Facebook because one can take their time in selecting and reflecting on personal information they post on Facebook, and can carefully emphasize aspects of themselves that they prefer (Gonzales & Hancock, 2011; Zhao, Grasmuck & Martin, 2008). However, the audience who is receiving this information is not necessarily known, but assumed. As such, an individual's self-presentation and impression management is presented to an imagined audience (Turkle, 2012).

2.9.1 The imagined audience

It seems imperative at this stage to consider the audience to whom individuals direct their created images and impressions. SNSs have changed the dynamic of how individuals communicate and share information by fostering a perception that there is always an audience following one's SNS profiles, and looking into or observing their life (Brown, 2013; Ellemers et al., 1999). Instagram, for example, allows one to edit and post photographs (taken on their mobile phone) of current activities onto their profile, to be observed by their network of contacts or 'followers'. Facebook further enables individuals to present their interest in movies, books, or music in the 'about me' section on one's Facebook profile (Brown, 2013). Self-presentation of such a nature is typically done in ways that allow individuals to consciously present themselves in an optimal way. The intended audience of such a display is, on Facebook, given the title of "friends". The use of such a label given to people who are able to view this broadcast of others lives, adds an interesting dynamic to these social connections. As such, individuals can articulate these connections in a public space, and thus verify the reality that an audience is able to keep updated with their life (Brown, 2013; Turkle, 2012). However, the user does not actually know who is viewing their profile, and as such the audience is not real, but imagined.

Constant bombardment of others self-reported positive life events and frequently seeing photographs of others happy moments are common experiences of Facebook use. As such, it is quite understandable that information of this nature portrays individuals as always being happy, and living better and more exciting lives (Chou & Edge, 2012). In contrast, frequent Facebook users whose own lives may not always be positive and happy are likely to perceive that life is not fair (Chou & Edge, 2012). Such is the case that when one is browsing their newsfeed on Facebook an overwhelming number of status updates will acknowledge the fun activities and exciting holiday travels of their friends, and very few will report their mundane day at work (Midgley, 2013). With regard to the common scenario herein described, it is likely that after spending time on Facebook, one is left with a positively skewed perception of their friends' well-being and their quality of life (Midgley, 2013).

Indeed, the more frequently one uses Facebook, the more vulnerable they are to having a distorted perception. A common attribution error, when forming impressions or judging others based on information made available on Facebook, is known as correspondence bias. Such a bias involves an assumption that the words and actions of an individual accurately reflect their personality or a stable personal disposition that enables them to constantly reap enjoyment from life (Chou & Edge, 2012). Thus, when one sees happy pictures of others posted on Facebook, one may conclude that the individuals are happy and fail to account for the individuals' circumstances or the occasions that foster these positive emotions. According to Chou and Edge (2012), individuals often assume of others "that happiness is a stable characteristic of their temperaments and that they are constantly enjoying good lives" (p.118).

2.10 Self-esteem and self-presentation

A potentially positive outcome of the selective self-presentation and positivity bias that is characteristically observed on Facebook is the potential it has to influence one's self-esteem. According to Gonzales and Hancock (2011), evidence suggests that the way one presents their self online can be integrated into their self-identity. This is known as an identity shift and is a phenomenon by which one's self-concept is a representation of their online self-presentation. Thus, an optimized self-presentation on Facebook can affect one's attitude toward themselves and can elicit a positive change in one's self-esteem (Gonzales & Hancock, 2011).

An additional positive attribute of Facebook use is the advantage that one gains from engaging in increased levels of self-disclosure (Nguyen, Bin, & Campbell, 2012; Trepte & Reinecke, 2013). In a review of experiments and surveys by Nguyen et al. (2012), it was revealed that there is a far greater amount of self-disclosure on various forms of CMC than in interactions that occur FTF. This increase in disclosure is due to a number of attributes. In addition to a decrease in barriers to interpersonal interaction, researchers have also suggested that increased self-disclosure is in fact encouraged by some forms of CMC (Ellison et al., 2007). Numerous theories support this notion, including the Media Richness Theory (MRT) and the Social Identity model of Deindividuation (SIDE). According to the MRT, individuals tend to disclose information to a greater extent and of a more personal nature on CMC due to the fact that the media via which they are communicating is less rich. In this regard, CMC such as Facebook, IM, or email are less effective in expressing emotional and complex information, due to a reduction in socially contextual cues – one is not able to adjust their tone of voice, facial expressions, body language or other forms of non-verbal communication (Amichai-Hamburger, Kingsbury & Schneider, 2013). The SIDE proposes that online-individuating cues are minimal and that, as a result of this, self-disclosure increases. Furthermore, the model indicates that increased self-disclosure occurs due to the perceived socially determined norms for that medium of CMC, which appear to be quite salient (Amichai-Hamburger et al., 2013).

A fundamentally valuable element or feature of Facebook in the assistance of self-disclosure and positively self-presenting is that of the status update. A status update is a short message that is posted onto the profile page of the user and to the homepage (which is also known as the “newsfeed”) of all the user’s Facebook “friends” (große Deters & Mehl, 2012). The status update is an incredibly popular form of communicating, and may be used to share anything from objective information to one’s deepest thoughts and reflections. Furthermore, the status update is an interactive forum and one has the option to make a comment or indicate that they ‘like’ what has been conveyed. Status updates are available on most SNSs; indeed, on Twitter, the status update is the main function. However, while a status update on Facebook is only made available to all of the users Facebook friends, on Twitter they are directed to a largely unknown audience (große Deters & Mehl, 2012).

As with most forms of CMC, the status update has been the subject of contradictory research findings. On the one hand it is criticised for undermining FTF communication and

is, as such, considered to be less natural, of poorer quality, and adversely affecting one's well-being (große Deters & Mehl, 2012). However, on the other hand, it is considered to be a feature that facilitates the maintenance and strengthening of relationships (Ellison et al., 2007; Valkenburg & Peter, 2007b; große Deters & Mehl, 2012) and helps to maintain connectedness among friends. Further support for the function served by status updates regards the inherent value of expressive writing. In this regard, substantial psychological benefits have been found to result from writing about personally important subject matter, with status updates providing the ideal platform for sharing news and disclosing one's thoughts and feelings (große Deters & Mehl, 2012). Sharing of information in such a manner serves to foster feelings of intimacy, social inclusion and affection and may facilitate conversations that occur FTF, beyond the realm of CMC.

Whether or not the information that is posted on these popular SNSs is true or not remains largely unknown by those reading it and, as such, may not be an accurate reflection of how people are actually living their lives (Chou & Edge, 2012). Findings suggest that information individuals choose to display is more likely to be a display of how they would like their 'friends' to perceive them. (Brown, 2013). If everyone is seen to be living lives that are better, it follows that individuals will potentially have decreased self-esteem (Brown, 2013; Chou & Edge, 2012). The observation of others SNS profiles and comparing them to one's own has been termed social comparison.

2.11 Social comparison

Making social comparisons among one's social acquaintances and friends occurs regularly and is an "inevitable part of daily life" (p.28). However, due to the increased popularity of SNSs, the frequency of such comparisons may be more prevalent than ever before (Fardouly, Diedrichs, Vartanian & Halliwell, 2015, Midgley, 2013). SNSs in general provide one with the ideal platform to engage in various behaviours of observation and communication. One is either able to passively obtain information regarding one's whereabouts, recent activities and publicised personal interactions by viewing someone's profile (which has also been termed *facestalking* or *creeping*; Muise, Christofides, & Desmarais, 2014). Additionally, one is able to actively (via Facebook chat) or passively (via wall posts, comments or personal messages) interact with the people whom they are connected to on Facebook (Feinstein et al., 2013). On almost all SNSs, one is presented with

substantial opportunities to make comparisons between themselves and others according to various characteristics, traits or attributes, which may include success, physical appearance or popularity (Feinstein et al., 2013).

While not dissimilar in other social activities, upward social comparisons occur more frequently on SNSs. When one is presented with information regarding another person, there appears to be a natural tendency to socially compare oneself with the other according to self-evaluative information that will result in positive, negative or neutral self-judgement (Ellemers et al., 1999). Indeed it is often the case that when one is sharing information regarding a recent accomplishment in a FTF interaction, the individual will downplay their achievement and attribute it to other factors, essentially applying modesty to their situation. It certainly would appear that this is not the case in online information sharing (Midgley, 2013).

2.11.1 Envy. Facebook provides the ideal context for individuals to make negative social comparisons with others and that this can ultimately result in negative consequences (Chou & Edge, 2012; Feinstein et al., 2013; Shapiro & Margolin, 2013). In this regard, upward social comparisons may be a cause for adverse outcomes, with envy being noted as a likely consequence and can result in “frustration and exhaustion” among Facebook users (Krasnova, Wenninger, Widjaja & Buxmann, 2013; Midgley, 2013). A friend who makes use of Facebook or other SNSs to boast about their exciting weekend activities, recent holiday travels, their job promotion, or general good news is most likely to elicit envy (Midgley, 2013). In this regard, such social comparisons may indeed serve as a short term threat to the self-esteem of the individual making the comparison. This and other negative outcomes are most typically experienced by individuals who make use of Facebook for the passive surveillance or browsing of their ‘friends’ activities (Burke, Marlow & Lento, 2009; Midgley, 2013). Indeed, with students being likely to use Facebook to display “interesting, upbeat and attention grabbing details of their lives, online comparisons may be harsher than warranted” (Boyd & Ellison, 2008; Shapiro & Margolin, 2014, p.12).

2.11.2 Rumination. Additionally, regular Facebook use, making negative social comparisons and rumination were all positively related. Rumination is a cognitive action in which one persistently focuses on an issue of distress, and constantly weighs its causes and consequences (Feinstein et al., 2013). In this regard, rumination is a potential mechanism through which negative consequences, such as depression, will arise from upward (or negative) social comparisons. The act of rumination is a maladaptive strategy for emotion

regulation and is thought to be mechanism that exacerbates depressive symptoms arising from negative social comparison (Fardouly, Diedrichs, Vartanian & Halliwell, 2015; Feinstein et al., 2013). It is further reported by Davila et al. (2012) that greater variety and use of SNSs is associated with greater levels of co-rumination and may give rise to repeated and excessive discussions of one's troubles and concerns. An individual is more likely to ruminate more often when in a social interaction context that is devoid of verbal dialogue or FTF interaction (Davila et al., 2012).

2.12 Constantly connected

Despite evidence that use of mobile phones has advantages that are both numerous and unambiguous, potentially harmful and concerning behaviours have also been extensively associated with excessive use (Billeux, 2012). Although the mobile phone is indeed a very convenient communication tool, excessive use and over dependence has been noted in the daily lives of many people (Igarashi et al., 2008). A South African study, by Uys et al. (2012), found students at the University of the Western Cape spending an average of five hours directly interacting with others on their mobile (smart) phones daily, and remained online on various SNS's for roughly 16 hours each day.

It is further indicated by Billeux (2012) that mobile phones have, ironically, changed from instruments which promote and facilitate social exchanges into objects that increasingly interfere with them. While this may appear to be a bold statement to make, it is not uncommon for individuals to experience disturbances in social exchanges when mobile phones are used (Billeux, 2012). An excellent example in support of this statement is provided by Rosen (2012) who suggests that "we can't ignore our phones even as we're driving a car, walking, eating a meal, or talking to a friend" (pg 5) and by Geser (2002), observing that couples who share a meal repeatedly interrupt their conversations to check if they have received any messages (Przybylski & Weinstein, 2012).

Indeed, as has been stated already, mobile phones enable individuals to remain constantly connected to their social world, and as such they can potentially influence numerous interpersonal interactions. Srivastava (2005) observed that the need to check in with one's mobile device – as illustrated by Rosen (2012) and Geser (2002) above – is experienced because people associate their phone with their broader social networks. Thus,

the presence of a mobile phone is likely to divert one's attention away from their present interaction onto thoughts of people and events beyond their immediate context. As such, one focuses their attention on numerous other interests and concerns and is not fully committed to their present interpersonal experience (Przybylski & Weinstein, 2012), thus decreasing the quality and the emotional / personal investment of the interaction. In accordance with this notion, several eminent theorists assert that mobile devices may have a substantially negative effect on an individual's interpersonal relationships (Turkle, 2012). Turkle is able to cite numerous qualitative evidence that the mobile phone focuses one's attention away from FTF conversation by making the need or desire to maintain a wider social network salient (Przybylski & Weinstein, 2012; Turkle, 2012).

An experiment conducted by Przybylski & Weinstein (2012) to ascertain the influence the presence of a mobile phone has in the context of casual and intimate interpersonal interactions revealed valuable information in this regard. The results demonstrated that in the context of an interpersonal interaction, the mere presence of a mobile phone increased the likelihood of it interfering with the formation of a relationship and, as such, the relationships were of an inferior quality. Further evidence derived from the experiment indicated that mobile phone presence inhibited individuals from developing closeness and trust in their relationship, and a reduced level of empathy and understanding was reported (Przybylski & Weinstein, 2012). It was additionally noted that inferior relationships as well as decreased empathy and understanding were more pronounced when individual disclosure was more personally meaningful. In neutral conditions (that is, when no mobile phone was present), disclosure that was personally meaningful fostered feelings of trust and intimacy. An interesting subsequent finding that emerged was that the negative impact mobile phone presence has on relationship formation and quality appears to happen outside of one's conscious awareness. Thus it is plausible that mobile phones act as a prime that represents implicit associations of one's wider social network, which consequently interferes with the quality of FTF interactions. While this research is by no means conclusive, it certainly provides valuable insight and findings that inform numerous daily conversations, as many of these occur in the presence of a mobile phone, even if just placed casually on the table (Przybylski & Weinstein, 2012).

2.13 The Group Norm

Communication mediated via mobile phones and SNSs plays a unique role in the maintenance of relationships among young adults (Baym & Ledbetter, 2009; Hall & Baym, 2011). As such, it is necessary for relationship partners, or groups, to negotiate and establish shared understandings and norms for the use of text messaging. There is an apparent, substantial reliance among friends on mobile phone CMC in order to coordinate plans, to share and inform, or simply to pass time. Consequently, this establishes a powerful obligation among friends to be responsive (Baron, 2008; Hall & Baym, 2011). As such, the concise, targeted patterns of constant communicative texting behaviour can become an institutionalized ritual. In this regard, the text message thus becomes an obligation for individuals included in the group norms to adhere to (Hall & Baym, 2011).

CMC, particularly IM and text messaging, is also heavily relied upon among peers to be inclusive and validate friendships. However, it is also a great source of tension (Baron, 2008; Hall & Baym, 2011; Ling & Yttri, 2002). The ability to contact anyone at anytime is one of the appealing attributes, but being continuously available is also one of the most disliked. As a negative outcome of this perpetual contact, one may experience “hyper-coordination: an enhanced, anxiety-provoking relational dependence and engagement” (p.318) with using mobile phones (Hall & Baym, 2011).

With the abounding number of available SNSs and multiple options to communicate online through a computer or mobile phone screen, begs for an understanding of constant availability, and where to draw the line (e.g. Rosen, 2012). Frequent use of CMC due to a perceived expectation to be constantly available at all times has recently come under the spot light, and is noted as an area of high concern (Thomé, 2012). Demands for constant availability may emerge from the individuals self expectations, or those made known by one’s social circle, work or studies. A study by Thomée (2012) on young adults revealed that the majority of them felt obligated to keep their mobile phones on them at all times because of expectations to be constantly available.

Shapiro and Margolin (2013) question whether SNS use and expectations for constant connection may be a form of peer pressure. Such expectations may be comparable to social pressure students experience to partake in the student drinking culture, for example (McIntosh, MacDonald & McKeganey, 2006; Shapiro & Margolin, 2013). A substantial amount of attention has been placed on the term “peer pressure” and phrases such as “pressure to conform” and the appeal of “being part of the group identity” assist in

emphasising the potent role peer pressure plays (Greenspan, 1998, p.104; as cited in Borsari & Carey, 2001). However, whether peer pressure is the cause for individuals constantly being connected to their devices or that it occurs as a result of individuals own obsession (Rosen, 2012) is not fully known. Either way, there certainly exists an expectation to be constantly available to friends; this is further exacerbated by a fear of offending a friend or peer with a delayed response (Shapiro & Margolin, 2013).

2.13.1 Time to be alone. Research indicates that this constant availability can in fact have numerous and substantial disadvantages. One such drawback is that there is no longer a period in the day in which one is alone, a topic of concern highlighted in research conducted by Shapiro and Margolin (2013). Previously, adolescents would spend part of their day alone, without communicating or connecting with their friends. During these periods of quiet time they would make use of their own cognitions or resources, reflecting on their experiences and preparing themselves for the following day. At present, mobile devices are commonly the first things checked in the morning and the last things used at night (Rosen, 2012). Clearly, social independence is something very few people still experience, with mobile devices being the primary objects encroaching on individuals time to be alone. It has further been noted that technological devices have become like a “phantom limb”, and that one feels adrift and isolated without them (Turkle, 2012).

The advantages to be gained from times of solitude include better adjustment, increased self-efficacy and greater ability for emotion regulation. Frequent engagement with CMC and the Internet in seeking comfort and support from friends can ultimately decrease one’s internal locus of control and their autonomy, potentially hampering one’s identity development (Shapiro & Margolin, 2013).

An important concern associated with the frequent mobile phone use is that it may indeed be excessive and lack controllability, which would subsequently impact one’s daily living. Some of the most common problems associated with overuse are sleep disturbances, anxiety and the substantial concern of mobile phone use while driving. These issues will be discussed below. Other problematic areas include financial problems, stress, and symptoms of depression (Billieux, 2012; Thomée, 2012); however, these will not be discussed in detail here, due to contradictory reported findings in the literature (Kraut, et al., 2002; Lou et al., 2012; Valkenburg & Peter, 2009a).

2.14 Sleep

With regards to the numerous concerns and problems that arise with the excess use of text messaging, one that is frequently cited in the literature, and important in a number of ways, is that of sleep. Regular use of texting, particularly just prior to falling asleep, is noted as having a direct impact on sleep problems (Murdock, 2013). However, texting does not stand alone as the only element or device that negatively influences the quality or quantity of one's sleep (Thomé, 2012). University students are particularly notable for experiencing an assortment of problems related to sleep. Such problems include poor quality of sleep, insufficient amounts of sleep, irregular sleeping patterns (Murdock, 2013; Wolfson, 2010). Causes for such problems in sleep among students include perceived levels of stress, negative affect, and a collection of other symptoms of strain that arise during one's time at university (Murdock, 2013).

Previous research has identified mobile phone use as particularly prevalent object associated with sleep problems, although mechanisms have only been investigated to a limited extent. A study conducted by Munezwa et al. (2011) reported findings that strongly supported an association between sleep disturbances and the use of mobile phones after lights out. According to Loughran et al. (2005), pre-sleep exposure to the electromagnetic fields that are emitted from mobile phones decreases an individual's "rapid eye movement" (REM). Furthermore, it has been indicated that melatonin secretion in individuals who are exposed to mobile phones immediately prior to falling asleep were significantly lower than those who lacked mobile phone exposure, thus delaying the onset of sleep (Munezwa et al., 2011; Wood, Loughran & Stough, 2006).

From these findings it is evident that using a mobile phone prior to falling asleep influences a number of physiological factors such as "sleep encephalogram and melatonin-secretion rhythm" (Munezwa et al., 2011, p.1019). Additionally, texting has been associated with the arousal of other physiological measures, including muscle tension, respiration and heart rate (Lin & Peper, 2009; Murdock, 2013). Therefore, in a number of various ways, frequent texting serves to direct one's physiological state of being such that it is not conducive to relaxation or sleep (Murdock, 2013).

Additionally, one can surmise that if the content of messages sent and received prior to falling asleep is significant in terms of emotion, disclosure or information, they may provoke rumination or contemplation and subsequently induce a state of cognitive or

emotional arousal (Munezwa et al., 2011). Arousal such as this is considered to be a substantial cause for symptoms of insomnia (Munezwa et al., 2011). In light of this, it may be considered that mobile phone use, particularly with regards to sending and receiving text messages, would influence psychological factors that impair sleep. Thus, a number of elements, both psychological and physiological, are affected by mobile phone use in the pre-sleep state that subsequently impairs sleep quality and quantity.

2.15 Anxiety

Research indicates that anxiety is experienced when one's mobile phone is not kept near them, further supporting the notion of always having it readily at hand, even while sleeping (discussed above) (Igarashi et al., 2008). Indeed, this is substantiated by an apparent sensitivity toward mobile phone use in maintaining relationships and significant concern is shown regarding isolation or disconnection from friends if CMC is not possible (Igarashi et al., 2008). CMC has become associated with other behavioural addictions; identified symptoms include cravings, mood regulation expectations and an apparent lack of control (Griffiths, 2005; Widyanto & Griffiths, 2006). Focussing on text messaging specifically, Igarashi et al. (2008) have termed this lack of control as "text message dependency" (TMD) and discuss the numerous ways in which it represents a dependent and compulsive behaviour disorder that interferes with one's daily functioning. In line with this, Rosen (2012) mentions how people are constantly checking their phones, regardless of whose company they keep or context they are in; the very device that is used to enhance communication and strengthen relationships can be the cause of great anxiety and occupy our thoughts even when we are not using them.

If such an obsession – or to use a less emotionally-driven term, focus – is placed on the importance of keeping connected via CMC, one must consider what happens if it is not reciprocated. Purposeful isolation or exclusion leads to feelings of ostracism in social networks that are primarily mediated by CMC. Thus it is evident that one's relationship with intimate friends is an important trigger in this dependency on CMC. As such, many people appear obsessive about the sending and receiving of messages so as to avoid rejection (or even just incorrectly perceived rejection), which subsequently implies that the dependency is related to a compulsive need to gain approval from friends. Indeed, as indicated by Reid and

Reid (2008), when a message received by CMC is left unanswered, it is usually interpreted as rude.

2.16 Mobile phone use while driving

One of the most concerning behavioural outcomes of one's need to 'text now' is when the mobile phone is wilfully and nonchalantly used while driving a car. Driving and mobile phone use is a substantial hazard for road safety, with about 28% of car crashes in America (Atchley & Warden, 2012) being accounted for by drivers typing on their phones. According to Klauer et al. (2006), driving and typing is at least five times more dangerous than drunk driving; in a study by Atchley, Atwood and Boulton (2011), more than 95% of young drivers reported that they type messages while driving (Atchely & Warden, 2012).

While younger drivers indicate a knowledge of the risks that result as a consequence of phone use while driving (Atchley et al., 2011; Atchley & Warden, 2012) and claimed to be aware of the fact that car crashes related to texting were highly preventable, they continue to engage in this behaviour at concerning rates.

Atchley and Warden (2012) conducted research to understand the dynamics which underlie the processes by which young adults decide to send and respond to messages while driving. Their research aimed to highlight why this behaviour appears to be undertaken impulsively, and to determine what the inherent value was in the sending and receiving of messages. A key element of their findings indicated that the inherent reward of messages sent and received via CMC was its informational value. In line with this finding, the reward that is associated with texting loses value over time, especially if the message is received from a close relationship. Furthermore, the data suggests that, with regards to the processes involved in deciding to send or respond to a message, greater value is placed on immediacy. Thus, it can be derived from these findings that the value placed on receiving and responding to information via typed messages are given such importance that the context or potential risks are uninfluential in the need to "text now" (Atchley & Warden, 2012).

The mobile phone industry has seen substantial economic growth in all sectors. Thus, while one certainly cannot presume that these concerning outcomes of mobile phone use and texting are unique to the student (or young adult) population, it is reported that university

students are in fact a target market that has been identified as the most important (Head & Ziolkowski, 2012; Jurisic & Azevedo, 2011; Totten, Lipscomb, Cook & Lesch, 2005).

2.17 Academic ramifications

In regard to the above discussed, constant exposure to social media and use of CMC, it is unavoidable to mention the role that frequent use, and the highly prevalent concern of task switching (Rosen, 2012; Rosen et al., 2013), has on academic outcomes. Indeed a vast number of research has made it quite clear that the academic ramifications are severe (Johnson, Cohen, Kasen & Brook, 2007; Rosen et al., 2013), while in contrast, some research states that it may also positively influence students academic outcomes (Rosen et al., 2013).

It is hypothesized that the relationship between use of media among university students and poor academic results may be due to displacement in their activities. In this regard, it is surmised that regular engagement in media technology actually displaces important activities required for academic success. Such activities include focusing in class, doing the required readings and completing homework and assignment tasks. Impulsivity and attention problems may also result, as the unintellectual activities on CMC encourage passivity behaviour and promote regular checking of devices (Rosen, Carrier and Cheaver, 2013; Walsh, Fielder, Carey & Carey, 2013).

The use of the Internet and different forms of CMC late into the night may result in fatigue and ultimately affect their academic outcomes (Cao et al., 2011; Lin et al., 2011). Furthermore, the quantity of electronic media that a student uses is indirectly proportionate to their grade point average (GPA) (Shapiro & Margolin, 2013). The total hours students spend studying are less *and* of poor quality due to regular engagement with multitasking, with roughly 60% of students reportedly using CMC devices while they study, do homework, or attend class (Shapiro & Margolin, 2013). In this regard, students may find surfing the Internet or interacting with friends online as an easy distraction while doing homework or studying (Lu et al., 2012).

2.17.1 Task switching. Multitasking, or task switching, is a very common activity undertaken in this world of rich, varied technological and media devices and is a prominent phenomenon in the student population (Rosen, Carrier & Cheaver, 2013). Recently findings from 500 US university students reported that 73% of participants were unable to study

effectively without their mobile devices or some form of technology being present in their vicinity and 38% of students reporting an inability to study for more than 10 minutes without checking a CMC device of some sort (Rosen et al., 2013). Further findings by Marci (2012) revealed that the average young adult switches tasks every two minutes, a total of twenty-seven times in an hour. Engaging in regular task switching may result in detrimental outcomes, as not only does it require more time to complete the initial task, but shallow thinking and significant disruptions in memory replace those of deep thought, focus and analysis.

2.18 Summary

The above literature review considered the environmental and contextual factors that are implicated in university students' use of CMC. A background of the university environment and why students are a particularly interesting population to study was initially discussed. This was followed by an explanation of CMC and the different elements it comprises. Thereafter the dynamics of CMC were discussed, and the social and technical affordances that it enables were highlighted. Important social considerations, pressures and expectations of the university student were then explored and the impact of daily CMC use was discussed. The chapter was closed by discussing the potentially problematic outcomes of excess CMC use. The following chapter shall describe the use of the Social Identity Theory (Reicher, Spears & Haslam, 2010) as the theoretical framework utilised in the present study.

Chapter 3: Theoretical framework

3.1 Introduction

A discussion of the theoretical framework made use of while interpreting the findings of the present study will be provided in this chapter. Firstly, the role and importance of utilising a theoretical framework will be discussed, followed by a description of the Social Identity Theory (Terry et al., 1999), which was used in the present study. To conclude, an illustration of the application and use of Social Identity Theory will be provided.

3.2 Background

It has been argued that, although a theoretical framework is an invaluable element of a qualitative research study, the role of the theoretical framework, or lens, may vary depending on the research design that is used. A characteristic property of a phenomenological study is that the researcher should not be guided by any preconceived expectations, notions or frameworks (Anfara & Mertz, 2006). This approach is an important one to consider, as interpretative phenomenological analysis (IPA) was used as the method by which the data was analysed and sought to explore the individual's experiences the way he / she sees them and not through a pre-determined lens. Creswell (2013) argues that undertaking a qualitative study should not be focused on verifying a test or theory from the outset. Following an inductive model approach, it should be during the process of data collection and analysis that a theory may emerge. As such, this theory would be used later in the research process, typically during the data interpretation phase.

Selecting a theoretical framework for this study was a fairly arduous task as a substantial number and variety exist. However, several options thought to be of relevance were considered. These included the Use and Gratification Theory, which looks at how individuals gratify their social and psychological needs by using different forms of social media. Social Capital Theory was also researched as a viable tool; it considers how individuals are able to build and maintain social capital (that is, resources to be gained from social connections) through CMC use. Bandura's Social Learning Theory – observation of others' positively and negatively reinforced behaviour on social media provides a means by which individuals are socialized – was also explored. This proved promising as Bandura

argues that individuals will mimic the behaviour they observe so as to be positively accepted; conversely, they will avoid behaviour which does not promote this. By this means, individuals' behaviour regarding CMC use would be shaped by those around them. Although all of these theoretical frameworks were relevant and able to contribute to understanding students use of CMC, the researcher was not quite satisfied. The dissatisfaction stemmed from them not quite fitting in with the intention of the study. Fortunately, during the research processes of data collection and analysis, a theoretical framework emerged from the participants' accounts of their experiences, namely the Social Identity Theory (SIT).

3.3 Social Identity Theory

Social Identity Theory, a term coined by Turner and Brown (1978) based on the early works of Henri Tajfel in the 1970s (Turner, 1999), explains that individuals' behaviour and psychological processes are shaped by their social context and structures (Reicher et al., 2010). This theory aims to account for how social structures can impact what people do. Generally speaking, the theoretical framework in this study focuses on sense making and social construction as the process which people use when creating and establishing their identity and navigating their social worlds (Anfara & Mertz, 2006). This broad theoretical orientation, with a specific focus on individuals' identity formation within the social context of the university environment and the developmental phase of the emerging adult, was not an original conception of the research. It was through a thorough engagement with the participants' accounts during the data collection, transcription and analysis phases that the prominence of (i) identity (ii) social desirability, and (iii) self-presentation in students' use of CMC, was brought to light. Indeed, upon reflection of the literature review, SIT was mentioned in several prominent sources that researched CMC use (these included Pempek, Yermolayeva & Calvert, 2009; Rosen, 2012; Walsh et al., 2013; Whittaker & Gillespie, 2013). This theoretical framework can be, and has been, applied in various contexts, from organisational identities to intergroup discrimination (Turner, 1999; Mills, Bettis, Miller & Nolan, 2005). As such, the theoretical framework needed to be refined so that its application in this study was relevant. The conceptualization of the theoretical framework was refined and focused more specifically during the data analysis phase.

Although SIT has come under questioning, and limitations and critiques of its theoretical foundation have been identified, these critiques are scarce. One critique that is

potentially herein relevant is that individuals' behaviours are seldom solely influenced by social identity, but that it occurs on a continuum of personal- and social-identity. SIT does not pay consideration of the role of personal identity in understanding individuals behaviour (Bornman, 2004), and as such this could be seen as a limitation in a study that desires to understand fully the dynamics of individuals' behaviour. It is important, however, not to critique a theory for failing to do something it was not originally designed to do (Hogg, Terry & White, 1995), which might indeed be the case with the above mentioned limitation. Either way, such a limitation is not of concern in this study, as the methodology used focuses on the individuals experience and meaning making, allowing their individual personality to be expressed and considered.

The most prominent literature source, in which the concept of Social Identity Theory was highlighted, was that of Rosen (2012); upon later review, it formed the foundation upon which the theoretical framework was developed in this study.

Rosen (2012) states that people are inherently social beings, whose identities are bound to different qualities, ideas, groups of people and situations (Rosen, 2012). As mentioned in Chapter Two, university students are at an essential phase of independent socialisation and are particularly influenced by their peers, and by their desire to belong (Gangadharbatla, 2008). Furthermore, a natural characteristic of human nature is engaging in social comparison; whether it is done so consciously or not, individuals tend to compare themselves to the rest of the world (Rosen, 2012). Additionally, interpersonal relationships and friendship formation are widely acknowledged as pivotal elements to sound development and well-being, and are inextricably linked to the development of personal identity in a social context (Buote et al., 2009; Helliwell & Putnam, 2004). Indeed, the world in which we live dictates numerous social pressures to be liked and accepted (Rosen, 2012). The SIT (Bornman, 2004; Hogg & Abrams, 1999; Sherman, Hamilton & Lewis, 1999; Terry et al., 1999) proposes that an individual's desire to belong directs one to think and act in accordance with the social norms and values of the group with which one identifies. Furthermore, a prominent reference in various SIT research that concerns individuals focussing on image and impression management is the work and ideas of Erving Goffman (1959) (e.g. Jenkins, 2014; Manago et al., 2008; Rosen, 2012), who described image presentation as being framed by the portrayal of specific identities in order to gain peer acceptance or approval (Jenkins, 2014)..

An example used in Rosen (2012) to illustrate the power of social networking in SIT mentions how images of socialised individuals and situations can influence one's own thought and action processes, linking to how people self-present on social media. This example considers the following scenario: an individual who views daily activity logs and photographs or comments posted by their friends on an SNS such as Facebook or Twitter, might perceive their own life as dull and boring in comparison to the fun and exciting lives that their friends seem to be living. The inner dialogue of an individual observing such images might include thoughts of comparison, such as, "They have so many friends and always do cool things together", "I wish I had such an incredible social life" and "I wish I was as good looking as they are". As can be seen from this inner dialogue, the image that is portrayed is inducing envy in the observer by means of social comparison. An image that leads to social rewards and that is viewed positively might subsequently influence the observer to change their views about themselves. As such, this may result in altering their own self-presentation so as to feel a sense of social belonging, and to represent the values and norms typical among the group they identify with. While this above example is purely hypothetical, it valuably illustrates the dynamic way in which comparison, impression management, self-presentation and the desire to belong are inherently linked to SIT. In this regard, it serves to demonstrate how SIT may be used as a theoretical framework in the interpretation phase of this research, and in viewing the results through a SIT lens where applicable.

Prominent findings – in the form of themes – from the results section (Chapter 4: Results), that encouraged the emergent theoretical framework used in this research included the following:

- An addiction to fitting in
- Feeling left behind if you're not connected the whole time
- The image you want to show the world
- Increase in social comparison and envy

The theoretical framework is used to facilitate the researcher in making sense of the data, in an attempt to explain why people are doing the things they say they are doing. As such, it endeavours to move beyond the realm of description into one of explanation. As it emerged from participants' accounts, it facilitated in conceptualizing their experiences.

3.4 Summary

This chapter provided an overview of the use of a theoretical framework in the interpretation of the present study findings. An overview of the theoretical frameworks relevant to the study was provided. This was followed with a description of the Social Identity Theory (Hogg & Abrams, 1999; Sherman et al., 1999; Terry et al., 1999) and a discussion of its utilisation in the interpretation of the present study's findings. The chapter closed with an illustration of how SIT can be applied. The following chapter will outline and discuss the methodology used in the present study.

Chapter 4: Methodology

4.1 Introduction

The following chapter will include an explanation and a brief discussion of the methodological approach that was made use of in this study. The rationale for the research will first be provided, followed by the research question and the aims and objectives. Subsequently, the design for the research study, a description of the participants, and the data collection, analysis and interpretation procedures will be discussed. The data analysis section will include an explanation of IPA and an outline of the procedural steps will be provided. Lastly, the methods utilised to maintain trustworthiness, and the ethical considerations attended to will be presented.

4.2 Research rationale

The number of research investigations undertaken in order to build knowledge and understanding of the way humans interact with various CMC and respective devices has, to date, been vast. As such, there is a large body of information that can substantiate the benefits to be gained by its use, and in opposition, the detrimental outcomes that may result. Most notably, research has focused on the links that exist between CMC and personality disorders, relationships, well-being, academic and scholastic performance, and emotional and social stability.

However, research of this nature has typically focused on individual types of CMC in isolation from the myriad that is available, and that numerous individuals make use of on a daily basis. Such examples might include a focus on internet addiction among students (Kuss et al., 2013), understanding social capital on Twitter (Hofer & Aubert, 2013), the importance of texting among first years at university (Skierkowski & Wood, 2012), or the relationship between loneliness and Facebook use (Lou et al., 2012). It is herein important to note that, since the dawn of the smart phone, all of these individual elements are now combined into one unit, and as such can be accessed anywhere and at any time. By limiting research to a particular element of CMC one does not adequately grasp the extent to which individuals are connecting or communicating through means of a computer or mobile screen. Nor does it

illustrate the ways in which such use of CMC alters the dynamic of how one spends time or performs role related activities.

Furthermore, most of this research has been undertaken using quantitative methods of data collection and analysis. While this is certainly of substantial advantage when conducting a review of the literature, and provides a vast amount of valuable and indeed essential data, it fails to impart an understanding of CMC use from the perspective of the individual. As such, the way people experience CMC in their daily interactions, how it is involved in their daily activities, and how they understand and make meaning of their CMC use, remains largely unknown. For a full picture of CMC to exist, it seems imperative to understand the dynamics of its use from the lived experiences of those who use it.

There is a substantial lack of research conducted among university students in the South African context. By filling this research gap with rich and valuable qualitative data there are several benefits. One such benefit is that it may assist students in understanding and conceptualizing their own behaviour towards CMC to a greater extent and in ways that may typically not have been available before. Additionally, this research may also serve to compliment the existent research and offer new avenues to explore.

This research study sought to investigate the dynamics that are involved in students' use of CMC and the potential impact it may have within their daily context. Furthermore, it sought to understand how, as emerging adults, CMC is utilized by students in the development of their social identities.

4.3 Research question

The current research sought to explore the question:

- What are the dynamics involved in the use of CMC by students, what potential impact does it have in their daily context, and how is it linked to their social identity?

4.4 Aims and objectives of the research

The research sought to develop an understanding of the characteristics involved in, and the dynamics surrounding, the pervasiveness of CMC that is evident in the student population. While substantial research has been undertaken into the study of this phenomenon, a detailed exploration of the actual lived experiences of students' daily interaction with CMC has not been undertaken. Interest was placed on the subjective, psychological well-being of the students, their identity development and their relationship formation. Additional insight was sought into understanding the obsession with the quantified self (that is, the constant recording of one's activities and whereabouts) and the lack of conscious control over Internet and mobile phone use.

4.5 Research design

University students, identified as being particularly at risk for excess use of CMC, experience unique environmental and psychological factors that promote this characteristic behavioural attribute (Christakis et al., 2011; Hall & Parsons, 2001; Rosen, 2012). As such, it is imperative that their experiences of this relatively modern phenomenon are understood. This study sought to explore in detail, by means of qualitative data collection and analysis, how students make sense of their life world – focusing on their use of and interaction with CMC – in both a personal and social context (Smith & Osborn, 2003). In order to achieve this, an exploratory method of investigation was implemented through the use of Interpretative Phenomenological Analysis (IPA; Smith & Osborn, 2003).

A qualitative approach was selected due to the research interest in how students experience their interactions with CMC, the meanings they attribute to its use, and how they make sense of the phenomenon of student CMC use (Willig, 2001).

4.6 Sampling

Purposive sampling, a method of sampling typically used in IPA studies, was used in identifying and recruiting participants for this research undertaking (Bless, Higson-Smith & Kagee, 2008; Willig, 2001). Participant recruitment was accomplished by two methods. The primary method, from which the majority of participants were found, was a request for

interested students to volunteer their participation in the study by filling in their details on a sign-up sheet. With the permission of the lecturer Dr Charl Nortje, after the conclusion of three first-year psychology lectures, the researcher presented the fundamental elements of the research and the desired aims and outcomes to all the students who were in attendance. Students interested in volunteering their participation were asked to fill in their contact details on a sign-up form. The students who signed up were then sent an initial introductory email re-stating the aims and objectives of the study, what participation would involve, and were then asked to provide times and dates which would suit them for the interview.

IPA encourages the use of a homogenous sample and researchers are asked to be mindful of this when participants are selected. As such, the following inclusion criteria, included in the presentation and the follow up introductory email, were decided upon: participants must be current students at Stellenbosch University, between the ages of 18 and 25, and must be fully emerged in the world of CMC, making daily use of at least two types of CMC. Although this sampling method resulted in relatively large scale interest among students in their initial willingness to participate in the research investigation, there was a noticeable lack of variety and diversity in this initial group. A particular shortfall, as an example, was that very few male participants signed up for the study; and that all those who signed up were taking first year psychology.

In order to overcome this shortfall in the diversity of the participant group, an additional sampling method was used. As such, snowball sampling was made use of as a means of recruiting participants that would contribute in diversifying and broadening the demographics of the participant group (Smith, Flowers & Larkin, 2009). The purpose of this additional sampling was to attract students who were not taking psychology as a subject, who were from different faculties or areas of study, and who were not first years. Snowball sampling is a method by which referrals are made by people whom are known to possess the desired characteristics indicated by the research criteria (Biernacki & Waldorf, 1981). Five participants were recruited using this method, and were contacted by email. The email stipulated all of the same information that was sent to the other recruits; namely, the purpose of the study, the desired aims and objectives, and finally a request for their willingness to participate. All five students responded in the affirmative, indicating their interest in the research, and their desire to participate.

Due to the idiographic nature of IPA and its focus on the individual, it is preferable that smaller samples are used (Smith & Osborn, 2003; Smith et al., 2009). Smith and Osborn (2007) advocate that smaller samples are between 5 and 10 participants; however, they conclude that there is no correct answer regarding sample size questions, and that the researchers experience should also be considered. For the purpose of this research, 15 participants were interviewed. Although this might be considered as large for a masters level IPA study (Smith et al., 2009; Creswell, 2013), detailed experiences from a broader spectrum of students (in age, sex, year of study and major) were sought by the researcher so that the findings may be more generalizable, and the emergent themes more applicable to the larger student population.

The concept of theoretical saturation, although originating in Grounded Theory, may also be applied to IPA studies (Willig, 2001). Theoretical saturation refers to the stage in data collection where no new information or themes are emerging from the participants (Willig, 2001). After the eleventh interview, the researcher was aware that numerous themes were repeatedly being mentioned and that saturation of the emergent data was developing. However, at that stage the majority of those interviewed had been 19-year-old female first years. The researcher sought to ensure that the detailed experiences of a varied student population had been captured. Considering that the remaining four candidates offered variety in age, gender and degree programme, it was thought to be valuable to hear their experiences. As such the researcher decided to interview all 15 student participants.

4.7 Description of participants

Of the 15 participants included in this study, there were 9 female students and 6 male students, aged between 19 and 25 years (mean = 20.7). Nine of the students were in their first year at university (60%), one had returned to university after pursuing a profession as a performer (6.67%), two were in their final year (14.33%), while the remaining three were completing postgraduate degrees (20%). Four students were studying in the Science Faculty (26.67%), three students were in the Law Faculty (20%), six students were studying subjects in the Humanities or Social Sciences (40%), one student was studying a degree in the Health Science faculty (6.67%), and one student was studying in the Commerce Faculty (6.67%).

Table 4.1
Demographic information of Participants

Participant Name (pseudonym)	Age	Gender	Faculty	Degree	Year
Lydia	19	Female	Science	UG	1
Briony	19	Female	Humanities	UG	1
Hannah	19	Female	Health Science	UG	1
Katharine	19	Female	Law	UG	1
Katie	19	Female	Humanities	UG	1
Christina	19	Female	Science	UG	1
Daniel	24	Male	Law	PG	6
Thomas	21	Male	Humanities	UG	4
Beverly	19	Female	Science	UG	1
Simon	24	Male	Social Science	PG, M	6
Abie	25	Female	Humanities	UG	2
Nicholas	20	Male	Humanities	UG	1
Charles	19	Male	Science	UG	1
Luke	22	Male	Commerce	PG, H	5
Sarah	22	Female	Law	UG	5

Note. Degree: UG = Undergraduate, PG = Postgraduate, H = Honours, M= Masters
Year = the number of years that the student has been at university

4.8 Data collection

A presentation was given at the conclusion of three, first-year psychology lectures, from which 19 students signed up to participate in the research. Five students did not sign up after the lecture, but contacted the researcher directly via email, indicating their interest to participate. Thus, 24 students were recruited from the purposive sampling method. A further five students were recruited by the snowball sampling method. In total, 29 students were recruited for the research study. Students were informed by email that participants would be selected on a first-come-first-served basis. As such, those who first responded to the email with their availability details and preferred interview dates formed the body of student

participants. 10 students from the purposive sampling method and five students from the snowball sampling method, a total of 15 students, were interviewed.

Data collection took place between 24 July and 25 September 2014. The participants were able to choose a date and time that suited him / her, and all interviews were conducted in a seminar room in the Carnegie Research Commons in the JS Gericke Library at Stellenbosch University. When selecting the location for the interview to take place, several factors were considered. Such factors included the central location on campus, the desire for a quiet and comfortable environment in which the interview could run smoothly, and a venue that would allow the recording to be uninterrupted, with minimal background noise. Before the interview began, participants were allowed a time in which they could ask questions relating to the interview process or about the project in general. After the purpose of the study and what was required of the participants was clarified, it was requested of them to read and sign a consent form. The consent form was explained to the participants and discussed in order to avoid any misunderstanding or confusion. Permission to record the interviews was also requested by the researcher. Students were ensured of their anonymity, through the use of pseudonyms, and that all matters discussed in the interview would remain confidential. The students were also asked permission for the researcher to record the process in order to transcript the conversation.

The preferred data collection method in IPA is the semi-structured interview (Chapman & Smith, 2002; Willig, 2001). In an IPA study, the researcher is required to enter into the participant's "life world", thus requiring the questions to be non-directive and open-ended (Willig, 2001). The purpose of the interview is to allow the participant an opportunity to share and reflect on their personal experiences, express their understanding of the phenomenon being studied, and how they make sense of it (Eatough & Smith, 2008; Willig, 2001). The open-ended format of the semi-structured interviews further allows the researcher flexibility in the interview, and for novel or interesting concepts to arise from the interview that has not previously been anticipated (Eatough & Smith, 2008; Macran, Stiles & Smith, 1999; Smith, 2004). Thus, after each participant had signed the consent form, they were asked open-ended questions pertaining to their experiences, understanding and meaning making of CMC use in their daily context as a university student (See Appendix D).

Each participant was interviewed once; each interview lasted between 45 minutes to an hour and 20 minutes, which, according to Smith (2004), is a standard allocation of time for an interview using IPA.

The interview schedule was guided by the following main questions:

1. Tell me about a typical day. How do you use CMC throughout your day, from beginning to end?
2. Will you please share and reflect on your experiences of CMC where you might have found it useful in coming to university, or when it has helped you socially?
3. What do you think are the main benefits you have experienced using CMC as a student? What are your thoughts as to why it is so popular?
4. What, if any, frustrations or challenges have you experienced with CMC? Can you reflect on your use of it during lectures and while studying?

So as to ensure that what the students were saying was being fully and correctly understood, techniques of probing were used. In cases where the researcher thought necessary the participants were asked to elaborate, so that their experiences and perceptions could be fully understood; this also allowed for much rich and valuable data to be collected. All of the students were thanked for their time and participation. This gratitude was also expressed in an email to each participant.

Each interview was recorded on a digital recording device. The interviews were transcribed verbatim by the researcher using ExpressScribe and MS word. After each interview was transcribed, the audio recording was listened to again while each transcript was read so as to ensure that the transcription was accurate and no typographical errors were made.

4.9 Data Analysis

The broader paradigm of phenomenology, from which interpretative phenomenology is derived, is interested in the way people are able to gain knowledge from the world around them. It focuses on understanding individuals' experiences of their life worlds, their perspectives, and how they make meaning of these experiences (Willig, 2001). The inductive principle of phenomenology indicates that a researcher must apply techniques in their

analysis of data that allow for flexibility. As such, topics or themes that had not previously been anticipated by the researcher are able to be brought to light (Smith, 2004). Phenomenology in psychology is concerned with the human experience, its diversity and its variability, and maintains that it is not possible for a researcher to withhold presuppositions in trying to understand a phenomenon. Instead, it calls the researcher to “bracket” their experiences, so as to engage with the phenomenon as it is experienced by the participants. As a significant component of this research was to explore and understand how an individual makes sense of their CMC use in a personal and social context, IPA was used as the method according to which the data was analysed (Smith & Osborn, 2003).

4.9.1 Interpretative Phenomenological Analysis. IPA was used in analyzing the data so as to capture the quality and depth of the personal experiences of students in their use of CMC within the university environment and the related expectations, desires and pressures that exist. The interpretive paradigm of IPA aims to investigate and elucidate the subjective reasons and meanings which motivate students’ CMC use (Terre Blanch, Durrheim and Painter, 2006). Through detailed explorations of how one makes sense of their personal and social world, IPA is able to provide a rich and detailed account of individuals’ experiences (Smith & Osborn, 2007).

IPA requires an idiographic approach, which involves a deep and empathic engagement with the individual, providing opportunities to gain insight of the insider perspective. An idiographic study starts with examining one case in detail until a sense of finality has been reached. Once finality in the analysis is felt, the researcher will analyse a subsequent case, following this procedure one case at a time throughout the entire set of data. Such a detailed engagement with collected data is facilitated by a series of steps. These steps, or stages, enable the researcher to identify prominent themes that emerge within each participant’s interview transcript and then across all the cases. This systematic framework, or series of stages, for data analysis has contributed to the appeal of IPA in psychology research (Willig, 2001).

4.9.2 The stages of IPA. The processing and analysis of the data was done according to the stages suggested in Smith, Jarman and Osborn (1999), which are also reflected in Willig (2001). The first stage of IPA involves reading and re-reading the transcript several times, such that intimacy and familiarity is gained with the individuals accounts. During this stage, nonspecific and extensive notes are made by the researcher. These notes are typically

written down on the left-hand margin of the page, and generally reflect the researchers initial thoughts or general observations of interest or data that is thought to be significant (See appendix G for an example). The research question is kept in mind throughout this process. By following this procedure exactly, the researcher was able to gain substantial familiarity with each individuals account. All of the interviews were conducted and transcribed by the researcher, each audio recording was listened to twice, and each transcript read at least twice. As such, the researcher was able to become fully immersed in, and familiar with, the data.

The second stage of the analysis process requires the researcher to identify themes that characterise the prominent findings in each section of the text. The identified themes must be labelled, and are typically recorded in the right-hand margin of the page (de Visser & Smith, 2006). The titles of the themes should be conceptual, and capture the essential quality and characteristics that are represented in the text. The researcher sought to remain as close to the participant's actual words as possible in the labelling of the themes. As such each theme comprises words directly from the participants – either *in vivo* terms or brief quotations – thus remaining true to their intentions, and the intention of the study (See Appendix G for an example). The researcher undertook this stage of identifying themes by hand and was inspired to label each theme using terminology or quotations directly from the text.

The third stage of analysis requires the researcher to attempt introducing a structure into the analysis. Firstly, the researcher must re-read the transcript with the newly-developed themes in mind, to confirm that they are indeed appropriate and accurate. The researcher then compiles a list of the themes that were identified in the second stage and thinks about them in relation to one another, finding those that are closely linked. Closely-linked themes will form natural clusters where concepts or meanings are shared. Separate and unique themes should at this stage come to light. Additionally, the researcher found that some themes were characterised by hierarchical links with others, according to how they relate or what they contribute. These themes were labelled according to the same process as that mentioned in stage two. It is herein important to note that the clusters of themes that form must be relative to the research question and be aligned to the original data. In order to ensure this, the researcher has to revert back and forth between the themes and the transcripts. Within this stage it is imperative that all themes are grouped or clustered, with super-ordinate and subordinate allocations. The researcher performed this stage of the analysis as described above, originally focusing on each theme separately. The list of themes was then coded and

these codes were applied to each transcript on the right-hand margin of the page (See Appendix G for an example).

The fourth stage involves the production of the results chapter (See Chapter 5: Results, pp 56-98). In this stage, the themes are displayed in their hierarchical structure, and the most prominent and the most relevant quotations are presented so as to illustrate each the themes. In addition to the quotations is an explanation where it was deemed to benefit the reader in understanding the overarching intention of the theme or sub-theme. Inevitably, certain themes that were generated had to be excluded as they were found to be overlapped with another theme, or were redundant in the context of the research question. The process of collating the quotations for each theme was done individually for each transcript, and then incorporated and reorganized. It is important to mention that the decision informing the researcher to retain certain themes and abandon others is subjectively decided according to their interpretation of the phenomenon being research and the research question (Willig, 2001).

4.10 Maintaining trustworthiness

A critical aspect of qualitative research is the concept of rigour or trustworthiness (Thomas & Magilvy, 2011). Traditionally, an evaluation of research typically referred to the assessment of validity and reliability, which are terms typically used in quantitative research. In qualitative research, however, the terms rigour and trustworthiness are used, and are ways of establishing confidence and trust in the findings of a research study. Long and Johnson (2000) state that research undertakings, such as the present study, should all be open to critique and appraisal. Further, it is suggested that the evaluation of a study should be a prerequisite for the application of the research findings (Long & Johnson, 2000).

Responding to a felt need to convince the dominant scientific community of the merits of qualitative research, Lincoln and Guba (1985) sought to translate validity and reliability, and were the first to address rigour and trustworthiness in qualitative research (Thomas & Magilvy, 2011). Reliability refers to how stable research findings are over time; and validity refers to how truthful the research findings are (Whittemore, Chase & Mandle, 2001). Translations for the following terms were provided: from reliability to dependability, external validity to transferability, internal validity to credibility, and from objectivity to

confirmability. According to Whitemore et al. (2001), despite a lack of congruence between qualitative and quantitative epistemologies, the abovementioned translations have proven to be valuable criteria in demonstrating qualitative research legitimacy. The methods utilised to ensure the trustworthiness of this study are discussed below.

4.10.1 Credibility. Credibility is concerned with ensuring that the interpretation of the data that is presented in the research findings are as true a representation of the reality of the phenomenon as possible (Merriam, 1995). The following strategies were employed to strengthen the credibility of this study:

- **Member checking.** Member checking, or participant validation, is a technique whereby the researcher provides each participant with a copy of their interview transcript and the any tentative interpretations of their interview. The participant is then requested to confirm the level of accuracy of the findings and to report any changes they deem as necessary or any other opinions they may have (Long & Johnson, 2000; Merriam, 1995). This strategy was implemented by sending each participant an electronic copy of their transcript, a copy of the analysis (Chapter 4: Results) and a request for them to comment on the level of accuracy.
- **Peer debriefing.** Peer debriefing is a technique whereby the analysis, significant findings and conclusions of the study are discussed with a colleague experienced in qualitative research, and their input and feedback is given. This review is intended to consider the findings and explore additional perspectives (Long & Johnson, 2000). The researcher was able to achieve this method by engaging in regular meetings and correspondence with the research supervisor.
- **Peer examination.** This method requires asking knowledgeable peers or colleagues to examine the research process and findings and to reflect or make comments on the research process, accuracy of the interpretations and plausibility of the findings (Merriam, 1995). Peer examination was achieved by submitting a proposal to the Stellenbosch University Department of Psychology to be reviewed by two colleagues with substantial knowledge and expertise in qualitative research, who supported the research undertaking. Additionally, a proposal was submitted to the Stellenbosch University Research Ethics Committee: Human Research (Humanities) (REC), who granted the researcher ethical clearance and approval to conduct the research.

4.10.2 Transferability. This refers to the ability for the research findings or methods of a study to be transferred from one context, or group, to another (Thomas & Magilvy, 2011). One strategy that enables a researcher to establish transferability is by providing a rich and thorough description of the population under study. An exhaustive literature review was undertaken in the present to study to ensure that rich, comprehensive information and descriptions of the research population, context and phenomenon being studied were provided. Additionally, while the principle of homogeneity among research participants was adhered to, the students interviewed were diverse in terms of their city of origin, cultural identity, age, year of study, and area of study. This diversity within the homogenous sample was determinedly sought so as to allow for the exploration of a variety of perspectives.

4.10.3 Dependability. Dependability refers to the process whereby another researcher is able to follow the decision trail, typically the methodology that was used, by the researcher (Thomas & Magilvy, 2011). For this to be possible, an ‘audit trail’ should be evident. An audit trail is normally represented by the methodology chapter, and is achieved by:

- (i) describing what the specific purpose of the research is,
- (ii) discussing the methods used for the recruitment and selection of the participants,
- (iii) describing the data collection and analysis processes,
- (iv) presenting the research findings and discussing the interpretation of the findings, and
- (v) communicating the techniques used to ensure the credibility of the research findings.

The present research study is able to establish dependability by providing detailed descriptions of the methodology used in the research study, in line with the above mentioned criteria.

4.10.4 Confirmability. Confirmability is based on the recognition that qualitative research is not objective (Morrow, 2005). It is considered that in qualitative research the role of the researcher is inextricably involved in the research process and thus it cannot be free of subjectivity (Willig, 2001). Confirmability serves to ensure that the research findings of a study do not represent the personal beliefs of the researcher and are not biased by their opinions or theories (Morrow, 2005). The findings should be representative of the phenomenon being researched and is founded on the principle that the integrity of the findings should lie in the data, such that the reader is able to confirm their acceptability and

applicability. Self-reflection was a technique used by the researcher to maintain confirmability and be mindful of subjectivity.

Self-reflection. Reflection in qualitative research is of fundamental importance. By making the researchers beliefs and values explicitly known, it facilitates the reader in understanding the researcher's context, instead of attempting to eliminate these effects. For this purpose, I include below a reflection of my experiences before, during and after the research process. As a current student at Stellenbosch University, being 25 years of age, and having previously spent one year at Rhodes University and four years at Stellenbosch University, my own context was very similar to those whom I interviewed. This may be viewed as an advantage because I was able to relate to the context the participants were experiencing, but at the same time endeavoured to bracket my own perceptions and experiences in this regard, not allowing any assumptions to be made. As such, each participant spoke of their experiences, thoughts and perceptions of the phenomenon as if it were to someone who did not have first-hand experience of the subject content. Additionally, I too have found myself caught up in the world of CMC, and felt social pressures, experienced habitual use, and been distracted by various forms of social media, CMC and CMC devices. However, what was of fundamental importance was an acknowledgement that my own use of CMC and the experiences I had had were always going to be different to those of people around me. For example, I now hardly use my mobile phone, intentionally keeping it on silent and often forgetting it in my desk drawer. Further, I access Facebook about twice a month, and do not have a Twitter, Instagram or Pinterest account. In fact, it is because of my interest to undertake this research investigation in exploring individual's experiences of CMC and trying to understand why they use it so regularly, that I sought to prohibit the experiences and reflections of the participants being clouded or influenced by my own. Through this self-awareness I was able to limit my subjectivity and researcher bias. It may even be viewed that my own similarity of context with the participants added a unique dynamic to the research process; ease of rapport was established quickly and the facilitation of the students in feeling comfortable to share their experiences openly and be at ease in discussing concerns – which I had often experienced first-hand or regularly observed. Moreover, I found that participants were in fact eager to share their thoughts and experiences, as they believed the topic was pertinent in their lives and something that they had not necessarily had an opportunity to reflect on.

An interesting dilemma which I faced was in securing the date and time for the interview, which students often committed to and confirmed, yet failed to arrive at all. I eventually decided to use Whatsapp as best means to maintain quick, efficient and almost immediate contact and communication with them. Any challenges I had experienced in using email as my primary means of contact with the students were quelled by using Whatsapp. This experience added an interesting dynamic to the research: that CMC had to be relied upon as the best way to ensure that the interview time and date were committed to.

When I met with my supervisor during the interviewing process I reflected on what I had experienced during the interviews. I recorded these experiences by compiling descriptive profiles for each of the students I interviewed, in which I was able to reflect on any personal experiences during this process (see Appendix F). These opportunities to reflect on my experiences brought about self-awareness during this data collection process, and it is my belief that the possibility of researcher bias was minimised as a subsequent outcome.

4.11 Ethical considerations

Several ethical protocols were adhered to in the proposal phase of this research study, as is required by the University of Stellenbosch and the Department of Psychology. Before the commencement of data collection of the research, a proposal was submitted to the Stellenbosch University Department of Psychology. Two academic members of staff in the Department of Psychology reviewed the proposal. After their feedback was received, and alterations made as recommended, an application for ethical approval from the Stellenbosch University Research Ethics Committee: Human Research (Humanities) was submitted. The proposal was reviewed by the Research Ethics Committee and approved on the 23rd July 2014, reference number HS1067/2014 (See Appendix A). In addition, permission to conduct the study with university student participants was obtained from the Division of Institutional Research and Planning at Stellenbosch University (See Appendix B). In the presentations by the researcher – given after the three first-year psychology lectures, explaining the aims of this study – and the emails sent during the recruitment phase of this study, all students were informed of the purpose, intention, and relevance of the study. The fact that participation in the study was done on a voluntary basis, and that students were able to withdraw their participation at any stage, without any negative consequences, and requesting their

permission to record the interviews was explained to all participants during the recruitment phase.

At the beginning of each interview session, the participants were requested to read and sign an informed consent form before any data was collected. A brief description of the research particulars, what participation entailed, and the participant's freedom to withdraw from the study were all included in the consent form. That measures would be taken to ensure that the confidentiality and anonymity of the participants would be respected was communicated. Pseudonyms were assigned to each participant instead of using their actual names and any information linking them to the research was not included in presented data. Tape-recorded interviews, transcriptions and data analysis documents were stored electronically on a password protected computer, and any hard copies were stored in a secured cabinet. The data will be appropriately discarded when it is deemed to be of no further use or value.

The foreseeable risk that students might experience from participation in this study was deemed to be low. However, since it was unknown who the participants would be, and what their experiences of CMC were, steps still had to be taken in the event that emotional distress or discomfort surfaced. Participants were informed prior to data collection that if any negative emotions arose during the interview, that they would be advised to visit the Centre for Student Counselling and Development. Throughout all interview sessions none of the participants expressed any emotional discomfort or uneasiness in discussing their experiences and reflections of CMC. The interviews were typically light-hearted in nature, and although some of the data was of a sensitive nature, the interviews remained positive and upbeat. As such, none of the participants needed to be referred to the student counselling centre.

4.12 Summary

The primary focus of this chapter was a detailed description of the methodology made use of in this research study. Firstly, a description of the rationale supporting the study, indicating the necessity for the exploration of individuals' experiences of CMC, was provided. Subsequently, the research question, and the aims and objectives of the research, were stated. Following this, the research design, and the reason why it was selected, was explained. The sampling method, focusing on participant recruitment and selection was also described. Then a description of the participants, and a table highlighting their demographic

information was provided. This included the pseudonyms used, and the percentage composition of the faculty the students were studying in, their year of study, age, and undergraduate or postgraduate status. The next section was a discussion of the data collection process, highlighting how the interviews were conducted. The data analysis process was thereafter described; this included a description of IPA and the steps that need to be followed. Lastly, the means used to establish trustworthiness in the research and a discussion of the ethical principles adhered to, concluded the chapter. The results and key findings of the research are discussed in the next chapter.

Chapter 5: Results

5.1 Introduction

The following chapter comprises a presentation of the emergent findings and results of the present study. The results are presented as themes, which became apparent throughout the research processes of the study, either during the interviews themselves or during the transcription and analysis phases. Several prominent themes were identified and are accompanied by various primary and secondary sub-themes. A list of the themes and their respective sub-themes are displayed in Table 5.6 in the Appendix (see Appendix E). An overview of each theme (Table 5.1, 5.2, 5.3, 5.4 and 5.5), with the associated primary and secondary sub-themes, is presented at the beginning of the sections, and are then explained in greater detail. Excerpts from the interview transcripts that were identified as important by the researcher are included throughout so as to substantiate and facilitate further understanding of the themes (see Appendix G). Reporting of the themes does not occur in order of importance but was merely guided by the order in which they emerged during the process of analysis.

5.2 Overview of themes

Thorough analysis and engagement with the research data resulted in the emergence of five main themes which highlight the various experiences and dynamics of the student participants use of CMC. Central to these findings is the important role placed on CMC in the daily lives of students, and the omnipresent influence of felt peer expectations and group normative behaviours. The first finding to emerge was that students primary medium of CMC is that of the mobile phone; they use it throughout the day for various tasks. The second theme describes the importance placed on selective self-presentation and impression management among the student population. A particular focus is herein placed on presenting a socially favourable and desirable image, and is considered by many as a socially-normative practise. The third theme considers the benefits of felt anonymity behind the screen, which facilitates individuals in being more confident in their communication and self-display behaviours. The use of CMC to avoid FTF interactions is presented in the fourth theme. This becomes significant to individuals as in FTF situations, they have less control when presenting their desired image; this is coupled with the felt need to abide by societal expectations not to be 'alone' (the assumption here is that one is not 'alone' when one is on

one’s mobile phone). Lastly, the use of CMC as a means of distraction, often being used as a tool for procrastination, is presented in the fifth and final theme. For an overview of all the themes, see Table 5.6 (Appendix E).

5.3 Theme 1: Always on my phone

Table 5.1

Overview of the first theme, with the primary and secondary sub-theme components

Primary Theme	Primary Sub-theme	Secondary Sub-theme
Always on my phone	Your whole life is on your phone	
	It does become a habit / you sort of just get addicted	<ul style="list-style-type: none"> • An addiction to fitting in • The go-to thing / whenever I have free time • Expected to reply immediately • You feel left behind if you not connected the whole time
	It’s cheap and simple	

The medium through which *all* participants indicated most frequently accessing the various forms of computer-mediated communication was the mobile smartphone. A number of reasons provided by the participants facilitated in understanding this better, which will be reviewed in the discussion of this first theme.

An important theme to emerge from all of the participants, and one which has substantial ramifications in understanding the use of mobile phones and computer-mediated communication among students, was that the use of different forms of social media was engaged in on a continuous basis via the mobile phone. When students discussed the frequency of use it was expressed as though it were common knowledge that the smartphone was in constant use for accessing social media throughout the day.

I am always on my phone... it’s literally with me every single time of day except while I sleep (Lydia)

...it is a throughout-the-day thing though...people are on their phones all the time
(Hannah)

... I think it's become the culture to be on your phone... (Charles)

...if not the most central thing in their life. I mean that's, like I said when someone's phone stops working they don't know what to do, they don't. Their life falls apart and they feel unorganised. They feel almost naked, 'cause they just so used to having their phones with them...it's that constant having that phone at your finger tips... (Daniel)

As indicated by the statement from Charles, mobile phone use has become expected normative behaviour and is ingrained in the student culture. Many participants expressed that one of the reasons as to why they had it on them all the time was due to expectations placed on them by their parents. However, while this does seem to be an understandable element of why they always have their phone nearby, it does not provide an answer for why they are always active on their mobile phones.

...my Mom always gets so crappy about it: "Lydia, why don't you ever answer your phone? You better have your phone with you." So, I make a point of always having it with me every single day of my life, in case she calls. (Lydia)

While one cannot doubt that this desire is both genuine and reasonable, what is so interesting is that the parental unit is subliminally supporting and encouraging the student to permanently keep their phones on them. In light of a sub-theme on habitual phone checking and usage, to be reviewed shortly, this may subsequently support or encourage frequent use of social media on the phone by the student.

5.3.1 Your whole life is on your phone

A prominent reason as to why students use their phones so frequently is because as an electronic device it is capable of doing more than merely facilitating CMC and providing mobile access to the Internet. The phone may, and often is, also used as an alarm clock in the mornings, to take notes throughout the day, to see what the time is, scheduling classes and meetings, setting reminders, taking photographs and so on. As such, the mobile phone is even more incorporated into one's daily routine, as indicated by the excerpts below:

So, each morning I wake up and I, um, snooze my alarm... check the weather on the internet...and then I go on Facebook. (Katharine)

I think cell phones have come to that point where they kinda do control your life a bit like especially if you have a really busy life, you can put your schedule on there, stuff that you would normally forget... where a venue is, you know... you used to have a book or something to write it in; I don't even own a diary now, everything I have to remember I type on my phone. So, frankly, if you don't have your phone with you then you kinda lose all that information. (Christina)

...recently my boyfriend's laptop got stolen and his phone also broke ... and he lost everything... all his music, all his photos, whatever is gone and... he found it very frustrating that literally your whole life is on your phone... (Lydia)

...my two roommates, um, are on their phones all the time, so, I mean, it's one of those things 'cause everything you need's on there, even a calculator if you want to work out something quickly - it's all, like, right there in the middle of your hand. (Thomas)

...when I wake up in the morning, um, I generally check my phone to check what time it is and if there're messages or whatever then I would respond to them. (Thomas)

I wake up with my cellphone, um, I have my alarm on and the first thing I do in the morning: I go on Whatsapp...did someone say "Hi" to me or whatever, and my Facebook doesn't always work, but sometimes I do go on Facebook to see what's going on there... (Lydia)

I wake up in the morning, check my Stellenbosch email, then I Facebook, and then I go to breakfast. (Hannah)

As can be clearly seen from the excerpts included above, students make use of their mobile phones for a variety of functions and purposes. However, it has not yet been investigated as to why. Certainly it is understandable why one might need to use their mobile phone to check the time or calculate a sum, but as of yet there is no straight forward answer to the question of why people so regularly use social media. Some evidence from the participants indicate strongly to the fact that it merely becomes habitual, is part of one's routine, and is potentially addictive.

5.3.2 It does become a habit / you sort of just get addicted

Once again, there is the recognition that use of social media accessed on one's mobile phone is not always a conscious decision, often happens without intention and has indeed been labelled as a potential addiction. Although addiction is certainly a very powerful term, its use here is merely non-diagnostic in nature and only used because it was mentioned by the participants themselves.

I think it's almost a habit, I don't think we realise these days how often we actually use our phones, just because it's there and it's lying next to you and so every five minutes you just need to check, even if there's nothing. (Sarah)

Part of what is so interesting about the prevalent and constant use of the mobile phone is that students often are not fully aware of the fact that they are using it. Indeed, students often check to see if there are any notifications or have received any messages on their phone without intentionally meaning to do so. As Sarah aptly states, often times one simply checks the phone just because it is there. Excerpts included below make reference to how certain participants identified their behaviour surrounding, and actual use of, their mobile phones as addictive.

I think there is definitely sort of an addictive side too, 'cause I remember I lost my other phone and, ya, it took me about two weeks of checking my pockets for the phone and not finding it there, and then being like "Oh crap, you know". You need to remember you don't have a phone right now, you know, it was quite funny. (Thomas)

...sometimes I'm quite, like, I'm quite addicted to it. (Katie)

...people get quite addicted to it. (Daniel)

...it can be addictive and compulsive, um, like, there are many people who, if their phone stops working will freak out, and it will be the end of the world. Um, I think, also if that happened to me it would be a big deal because it is something you use all the time. Like if people are smokers and then they just don't have cigarettes, it's kinda like the same thing, you need to check [your phone] (Nicholas)

It is above made explicit that certainly there exists the potential for ones mobile phone to become a behavioural addiction. In reviewing the above-selected interview quotes, one thing that is quite clear is that, because the mobile phone is something usually constantly accessible and available, one might develop a sort of dependency on it. Furthermore, linked

to the use of the term ‘addictive’ is another term mentioned by Nicholas: obsessive. Such is the case with student mobile phone use that one might actually develop obsessive tendencies in checking for notifications or messages.

I do think people are quite obsessed about it and they can’t bear to be without their phone for even a short while. Mm, even if you’re walking to class... most people are on their phone. (Christina)

As mentioned by Christina above, the desire students have to use their mobile phone is such that even when walking from one class to another they are likely to have it in their hands, engaging with some form of communication or social media.

The need for students to constantly be on their phone is further illustrated by terms the participants themselves have used, such as addictive, habit forming and obsession. Fortunately, further information was provided by the participants in aiding an understanding of why exactly the mobile phone – and the respective social media options it comprises – is so addictive, as well as what elements in particular are so appealing to the student population. These elements are herein displayed as secondary sub themes, and are as follows: (1) “An addiction to fitting in”, (2) “The go-to thing / whenever I have free time”, (3) “You feel left behind if you not connected the whole time”, (4) “The need to respond immediately”.

5.3.2.1 An addiction to fitting in. Within this secondary sub-theme there was a huge amount of self-realisation and meaning making achieved by certain participants, Luke and Beverly in particular. It is important to acknowledge that such depth of understanding of the personal reasons as to why one might have such a strong desire to keep connected to their phone is of incredible value to the study. Therefore it should not be expected that such a level of self-understanding be reached by all participants. Selected excerpts quoted below provide reasoning as to why a student may indeed engage in such regular mobile phone use such that it could be identified as an addiction.

...definitely addiction, well it’s, it’s not addiction per se to your phone, it’s an addiction to belonging. (Luke)

I think nowadays it feels like you always want to belong... maybe you tweet something on Twitter and somebody retweets it, then you’re like, “Ah, that’s actually cool, what I said”, or it was funny and, like, you feel like you belong in society. (Beverly)

What so potently comes across in these excerpts is the individual's (in this case the students) desire to belong and to be accepted into the society in which they identify themselves. In this regard it may well be viewed as a social pressure and a need for affirmation from others and their knowledge and/or approval of what is happening in one's life. Although it may be adding some breadth to this secondary sub-theme, two excerpts below express very clearly how one might feel they need another person's approval or affirmation in order to belong.

...they need that validation from other people, that, you know, they can feel this way, they can do this thing, they have an opinion. (Hannah)

...how many friends posted you happy birthday on your birthday, like, "Aah, like 20 posted, ah, I'm not popular and then, "Ahh, 50 posted on that wall and that person," then you can be like "Ahh, I'm not popular and nobody, I don't deserve the world..." (Beverly)

It is thus far indicated that approval from others plays a very important role in an individual's sense of self and belonging. Additionally, in order for one to feel that they "deserve the world" (Beverly), they need to be seen, acknowledged and made to feel well liked by other people to feel good within themselves. The final excerpt below incorporates this sense of a desire for popularity with socially fitting in and being accepted by one's peers, and how that is made evident in how students may be seen as being "addicted" to their mobile phones.

So, I'd say it's more so an addiction to fitting in than it is to an addiction to your cell phone... The celebrity effect of, you know, photos going on Facebook and whatnot, so if you into that, that could definitely be an addiction. An addiction to you know being, feeling cool or whatnot, but, um, I think for the most part it's just being addicted to feeling part of something. (Luke)

Thus, it would appear that some, if not all, students are very concerned with social approval and a sense of belonging within their broader peer group. As such, the addictive behaviour seen with mobile phone use is one of fitting in, which is merely facilitated by the phone, more so than it is an actual addiction to the mobile phone. Another important element of the above statement by Luke is the "celebrity effect", which will be further discussed in the third theme, 'The image you want to show the world'.

If, as has been mentioned by all of the participants, students are *always* on their phone, and that they interact with social media almost constantly, one might question how a student is able to find the time to engage in such regular use of their mobile phone. The answer to this question is because it is what one does whenever they have a moment to spare, and shall be reviewed in the following secondary sub-theme.

5.3.2.2 The go-to thing/ whenever I have free time. As the title of this secondary sub-theme suggests, many students view the mobile phone as an object with which they can occupy their free time. It has become the “go to thing” (Lydia) if one cannot think of anything better to do.

I make notes on my phone, like I told you earlier, I do voice recordings on my phone, um, it’s literally like the go-to thing that you do if you don’t have anything else to do. Uh, you do live your life through - I’d say my phone... (Lydia)

...the majority of my free time is spent on electronic entertainment basically...like computing, social networking stuff. (Nicholas)

But I think again going back to the whole self reflection thing, people don’t take time out to reflect on who they are anymore. And they use Facebook as a means to reflect... (Daniel)

I think... it does become a habit and you just always on your phone and documenting this and that... people don’t have as many hobbies anymore, because you just sitting with technology when you can go outside and kind of like take a walk, and learn to cook, and read a book... All these years of constantly being on your phone, checking messages... that habit’s going to take a long time to not be distracted by it. (Briony)

What is interesting to note at this point in the research data is that the mediums that students tend to favour in social media and CMC can be very time consuming purely by means of their design and inherent characteristics. Pertinent in this regard is the fact that the student participants all made mention of the fact that it is very easy to lose oneself, and track of the time, as they peruse the different media platforms at their disposal. However, this will be reviewed in detail in Theme 5, “A big distraction”, on page 90. The excerpts below further substantiate the prevalence of students occupying their time on the mobile phone.

...I'll just sit and I'll use the Wi-Fi and I'll Instagram normally and sometimes Facebook or Tumbler a bit, you know. And so whenever I have free time I'll generally connect to the Wifi and do that... (Hannah)

I have spoken to many people who will take their phones with to the toilet and just sit and go through Facebook. Not that they gaining anything from it; it's just like "I need something to do". And I know my flat mate used to drive me crazy 'cause he would just find himself, when he had nothing else to do, just going through the news feed on Facebook... So, you, ya, I think people definitely do... and maybe not even knowing, it's just become a habit. It's just that's what you do when you've got free time. (Daniel)

...it's very very convenient... but then it becomes what we consume our time with, really, and you think you need it. You think you really need it, but actually you don't... (Abie)

An interesting element to note in the above statements is that mobile phone use is often felt as a "need", that one *needs* something to do and that it can become all consuming. Additionally, what Daniel states is that often times one is not actually "gaining anything from it". Thus, it is suggested that it is not always rewarding to browse through, for example, one's Facebook news feed, but that it is simply done out of habit and a felt need.

It is, however, important to note that there may indeed be more than one reason as to why so much of one's free time is spent on their mobile phone, and why students might so favourably prefer/choose to be on them constantly. Two themes to provide a better understanding of this emerged from the interviews. It has explicitly been stated by numerous participants that, firstly, there is a felt expectation to reply immediately; secondly, that it might be to one's disadvantage if they do not check in with their social media regularly.

5.3.2.3 Expected to reply immediately. One of the key components in the felt expectation that one must reply immediately is due to the fact that on Whatsapp, which is the prominent means of text messaging among the students interviewed, is that one is able to see when last the person they messaged was online.

...with Whatsapp you can now actually see when the person has seen your message, you can see when the person was last online. And sometimes it almost feels like, okay like the person can see I've received the message I should probably reply. (Sarah)

Whatsapp especially, you can see that someone has gone online and you sort of expect them to reply as soon as they possibly can. Um, so, you almost waiting on them the whole time and you know they should be accessible on their phone because they were online say five - ten minutes ago. (Thomas)

...once I've read it I'll reply, because that's the thing, people can tell when you've seen their message. So, if you saw it when they sent it, it's kinda like, "Well, why aren't you saying anything? You know?" Whereas with Facebook I know that, okay, you're not online also but if the person is online then I do expect them to respond immediately, like "You're there so why aren't you saying anything?" (Hannah)

The expectation felt by and placed upon others for an immediate reply is unmistakable and was mentioned by all of the participants. What is also quite clear is that often the expectation does not seem unreasonable, because if the individual to whom one sent a message is not too busy to go online, then it is supposed that they should be able to reply. However, just as much as an expectation to reply was expressed, many participants were just as readily expressing sentiments of frustration regarding this unwritten rule of supposed phone etiquette.

...some people would get really upset if you don't reply instantaneously regardless of your situation. (Christina)

And it drives me crazy because I think it's unrealistic that you are expected to drop everything you are busy doing to reply immediately. And you do feel that pressure, I mean, when you get a message and you go online then you, like, "Oh now I've been online, they can see I'm online." And then you've got to stop everything you're doing and say, either, say "Hey sorry I'm busy I'll reply later", which you actually, in doing that, replying. So, it does kind of control your time, which I don't like, I mean, that's why I say I don't really get that drawn into it, I try not to. (Daniel)

To a certain extent it is herein suggested that the expectation to reply can ultimately play a substantial role in controlling how an individual spends their time. This is a very powerful outcome, and may ultimately result in people feeling very trapped. However, it is important to remain cognisant of the fact that it can also be advantageous for one to regularly go online. Such an advantage is described below, and explains how one is able to keep up to date with what is happening in their friends' lives.

5.3.2.4 You feel left behind if you not connected the whole time. One final factor that emerged as a reason to substantiate why students are always on their mobile phones was due to the fact that they did not want to miss out on any of the occurrences within their broader peer group. Thus, the constant connection that students engage in is below described as a way to keep tabs on everything:

I think people are so attached to their phones because they feel this like, need to be connected with other people... (Hannah)

... I just think you feel left behind if you're not connected the whole time, you feel like you have been left out of the loop, because people, for instance, establish groups on Whatsapp, and then you look at your phone and like, oh, twenty-eight messages later you kind of like, "Hey guys, what's going on, I just missed everything." So, I do understand why a... student would, would try to keep tabs on everything. (Lydia)

It is interesting to note that the felt need students have to be regularly connected to their friends via the mobile phone can in part be due to an avoidance of being "left out of the loop". An interesting phrase adopted by student culture and made popular in recent years is that of "FOMO" – the fear of missing out. Clearly, in review of the excerpts here included, students do not want to miss out on any action or news, and as such choose to remain close to their phones. This can be particularly understandable regarding the Whatsapp groups, typically comprising a group of students, closely connected due to their residence or coursework, family members or high school friends.

Um, I guess the main thing people worry about it is... if something's going to come up and they gonna only realise later. Like if something urgent comes up or, um, something happens and they not aware of it and they only find out later, I think that's the main reason why people need to constantly check that something's going on. (Nicholas)

5.3.3 It's cheap and simple

What is also remarkable is that there is a very prevalent possibility that the excessive and constant use, and popularity of CMC may well not only be driven by the psychological or social factors discussed above, but also from an economical point of view. Several of the participants stated that the relative affordability of CMC is a main contributing factor in their

use of it. Other such functional elements that may contribute to their widespread use were the simplicity and convenience of using them:

I love Whatsapp! It's so cheap and it's so simple. (Lydia)

I like BBM because you can see when someone has read your message and it goes through quick and it's cheap. (Briony)

'Cause it's cheap. I honestly think that's the only reason, I think if, um, if phone calls were for free or nearly for free people would phone all the time. (Christina)

It is very interesting to note that something purely economical can result in such a transformation in the way an entire population communicates with one other, and how it dictates how a student fills large portions of their time. As indicated by Christina above, if, for example, phone calls were as affordable as Whatsapp or BBM, things might well be very different. In the excerpts included below further evidence is provided as to how something driven by economics can change the means by which people interact entirely:

...I hardly ever phone people. Just because it's, it's more expensive. (Hannah)

I would Whatsapp them 'cause it's much cheaper than sending a text message and I wouldn't phone them 'cause that's expensive. (Katharine)

Furthermore, as technology changes and CMC is better catered for on mobile phones, so too has the frequency one accesses it changed. Whereas in the past one might have only checked their Facebook account in the evening, because they could not easily access it on their phone, nowadays everything is right at one's fingertips. All forms of social media are available on the recent models of mobile phones and they can be opened whenever one desires; as such, they are used more regularly:

I mean, everyone with iPhone and Samsung, it makes it a lot easier to use this stuff a lot more. I mean, a few years ago when everyone had different phones it wasn't really like you would check your phone every few hours or like log on Facebook on the computer at night, but now literally whenever you have a minute you can check everything at the same time. And it doesn't stop, it's always constant, I mean, you always getting notifications and, it's not like you get something and say, "Okay I'm only gonna look at it later," – if something comes up you look at it there and then, so it's just throughout the day, constantly. (Nicholas)

5.4 Theme 2: The image you want to show the world

Table 5.2

Overview of the second theme, with the primary and secondary sub-theme components

Primary Theme	Primary Sub-theme	Secondary Sub-theme
The image you want to show the world	It's very much a comparison	<ul style="list-style-type: none"> • You try to have a better life • So people can feel envy/ you want them to want to be you • When you meet them in person they're completely different • Too good to be true
	You feel like you've got to	
	Just letting the world know	<ul style="list-style-type: none"> • Living the moment • Keeping tabs
	You looking for that attention	<ul style="list-style-type: none"> • Everyone wants to be heard

The importance placed in the image that one portrays to their larger social world was mentioned numerous times by all participants and has by far been the largest central theme which emerged from the data collection and analysis process. What is most striking is that these results were not at all expected from the researcher and, as such, has offered an additional, complex dimension to the research. Moreover, it provides an insight of substantial value as to why individuals reap such enjoyment from, and place such importance on, these online platforms; it also facilitates a better understanding of the dynamics of CMC use.

As the title of this theme suggests, what is most prominent in individual use of social media platforms is the image an individual creates of themselves. This theme has been divided into multiple primary and secondary subordinate themes, so as to facilitate differentiating the psychological and social components that this theme comprises. In the excerpts quoted below it is made evident that social media is the perfect platform for one to

portray a favourable and desirable image of oneself. Furthermore, it is revealed that this is a socially-normative practise.

... as I mentioned LinkedIn, it dawned on me that these different platforms are opportunities to present different selves. (Simon)

Facebook is not supposed to be completely out there, it's more supposed to be the image you want to show the world, not exactly who you are. So I do find...on Facebook, social media, they not who they really are. (Lydia)

... you kinda get to create a image of yourself which you don't feel like you can do in a face to face relationship...I think it's all about the image, because people do not want to be not...socially acceptable , they just, ya, all about image. (Christina)

... this idea of having to portray yourself in a light that makes you look good is an addiction. It's a self awareness issue, I mean, people often aren't comfortable enough with who they are so they'll try and create an idea of who they are. (Daniel)

As can thus be seen, and is highlighted by Daniel and Christina, it is not always possible for one to portray their preferred self-image in person, and individuals would thus make use of social media to accomplish this. Daniel notes further that the addictive quality of CMC, particularly relating it to image design and control.

Additionally, the desire to design and create an image of yourself to present on Facebook, and other such social media, is linked to being able to control and manage the impression you make upon other people. As such, one can make themselves appear interesting and appealing so as to encourage social desirability.

...it's basically like a first impression... um, it's like trying to sell yourself on a profile. Um, and... if people don't find you interesting by your profile, I mean, they probably not gonna want to interact with you. (Nicholas)

I guess it's all an ego thing... 'cause I mean Facebook is for... basically advertising yourself. (Charles)

I think for a lot of people that's the biggest impression they give people. And they hide behind that, they build a facade of who they are and who they want to be seen as without actually being that person. (Daniel)

...social media gives you the platform to kind of make everything about yourself, so it's almost like you create a world around yourself... If you post something, it's almost like it's not about the person you're posting it to anymore, but about what are other people going to think about you... you actually communicating with a whole variety of people that aren't directly addressed. But all with just the purpose of, kind of, like building your own little self image. (Sarah)

... most people are very pretentious, and they like to kinda give off the aura that their life is perfect and nothing is wrong... So, I think there's a certain mask that society expects you to put on... on social media, everyone knows that it's kinda just the image you're trying to give. (Christina)

I mean, Goffman, he speaks about the way that we all actors and life is a stage, and how are we able to present ourselves in this specific light, but backstage there is a lot more happening. And I certainly think that Facebook is one very good example of being able to present your best self, and LinkedIn even more so, because that is far more formal in some senses, where you only want your business personality to exist. (Simon)

The last two excerpts selected, as quoted below, highlight the selectiveness of information that individuals choose to display.

I saw a picture yesterday on Facebook... that said... "Girls should stop editing their profile pictures because if you go missing no one's going to find you 'cause you're not actually the same person as you are in your profile picture." 'Cause like obviously you choose the best picture or whatever, but editing it and like making it look like it's not really you, because people do that, they don't show their true selves. And obviously...you post pictures of the good stuff, it's what you do. (Katharine)

...we probably all do it every time we post something on Facebook, because I think one also tends to be quite selective with what you put on there. ...kind of obviously to suit whatever you want people to think of you. (Sarah)

5.4.1 It's very much a comparison

One might question why exactly all of this information is selectively being displayed on Facebook and other CMC platforms. It is certainly understandable that an individual would like to portray socially desirable and acceptable self-images to their peers. Such reasons include being able to “present your best self” and “trying to sell yourself.”

However, it was further revealed that there was an important underlying reason for this self-display, namely that of social comparison.

...you put selective stuff on Facebook so you obviously won't put that stuff that's not glamorous or not great about your life, well, most people won't. Except if it actually attracts attention – some people do. So, that kind of leads to this, I don't know, it's almost like you live your life by comparing your life to other people, or wanting to achieve stuff that they don't actually have and just kind of pretend to have... (Sarah)

The fundamental overarching notion of comparison has herein been divided into five sub-themes: (i) You try to have a better life, (ii) So people can feel envy, (iii) You want them to want to be you, (iv) When you meet them in person, they're completely different, (v) and this presentation is too good to be true.

5.4.1.1 You try to have a better life. As the title of this secondary sub-theme suggests, it is indicated by participants that individuals selectively post the positive aspects of the activities they have participated in and the elements of their life. This is done with the intention of enhancing one's self- image and to appear as though they are living their life to the fullest.

I'll go on Facebook and I'll see, like, you see like amazing holidays and stuff and you just like, well, I just stayed at home the whole holiday, like what am I doing? Or you see people like have been going to the gym and stuff and you just like, well, I've just been eating... Like it's a very much a comparison... because people want to be like... they are having a better life than you. (Katie)

...it's kind of a way of lying... I've seen times when people go to a party and they make a status that it was such an awesome party but they didn't do anything besides sit on the couch. And it's just like, “Why do you want that?” Like, I don't know... they try to seem more desirable... you trying to have this better life. (Briony)

In line with this notion of “having a better life” is the idea of wanting to display the image of being happy. In addition, there is the apparent expectation to indicate, whether it is

accurate or not, that you have made a success of your life and that this expectation is a perpetuation of that found at a societal level.

I think they definitely inflate things with the pictures they put up, you know, they always like, “Ah, look at me, I’m so happy!” I think that the reason that they would do that is because you know it’s on display... people are like that... the way we are changes when we know people are watching us. (Hannah)

...with Facebook as an example. People make day to day seem to look enchanting... So, people are trying to glorify the everyday, um, and then the idea behind trying to glorify the everyday and make every little instant seem like this spectacular event. I mean, I don’t know where that extends from, maybe people are depressed in the sense that they need to find something to make life seem more worth it. But I definitely do think there’s a strong knock on effect from Facebook and all these social things that you need to be seen as being happy. You need to be seen as having made it, and having made something of your life, or making it. (Daniel)

... that’s why people are like that on Facebook: because they know everybody can see what they’re doing, they need to be doing it well... And people are very false because the world teaches us that we need to be successful... you have to get a job, have a fancy car... I think it’s the same... train of thought that’s carried through onto Facebook, where they feel they need to be, “Yay, ah, look at my wedding ring.” You know, and “Ah look, this, oh gifted car with a giant bow” and, you know, so that people can see how happy they are. When they’re, they just, they keeping up appearances. (Hannah)

Another element of this secondary sub-theme, according to several of the participants, is the fact that it is widely considered as the norm for people to engage in self-inflating behaviours so as to portray that the life they are living is of a superior quality to anybody else's:

...with the Facebook thing, trying to sort of stand out, create a sort of feeling that they have a better life than someone else, or... their life is more prestigious than it is. (Thomas)

...there are other people who are even more anal than I am and won’t allow anything on the internet lest it portray anything but perfection from them. (Simon)

...on an off day you look on Facebook and everybody, all these wonderful things are happening and your life sucks and you think everybody's living a better life... (Abie)

I think that's the basic fundamental layer that is Facebook. It's the whole point, it's somewhere where you can be seen...I mean people don't document everything of their day ... you don't do that because it's not all interesting. You only document the things that are really, like, cool, really sort of nice... about your life. And so people only get that sort of image of you... it makes you as a person seem bigger and better than anyone else. (Thomas)

People obviously... want to make themselves seem as interesting as possible. No one wants to be boring and, um, people want people to be interested in their lives. And if you can just enhance a certain... update... it's not going to harm anyone and it's just going to, like, exaggerate things a little, then I think obviously the majority of people do. (Nicholas)

The participants revealed two possible reasons as to why they might like to invoke the idea that their life is better than another's. These results are discussed in the following two secondary sub-themes.

5.4.1.2 So people can feel envy/ you want them to want to be you. Individual's use of CMC to make their peers envious of their quality of life and different experiences was expressed by the student participants. In addition, they explained that a subliminal desire in its use is "because you want them to want to be you" (Lydia).

... [On] Instagram... you trying to show people, "Hey look, I have this amazing stuff, and you don't have this amazing stuff" or... "Hey look, look at me, I'm so amazing, so many people like what I'm doing," you know... ? I felt like that in the holidays a bit, because I was like, "Oh everybody's doing such cool stuff and I'm kinda just like chilling at home, watching TV," you know. And you almost feel like you wasting your life a little bit... you definitely do feel like you could be doing more with your life. Especially when people are travelling overseas and they're posting pictures of "Ah, this beautiful beach and... that mountain" and you're like, "Ah, I wish I could be there"... and that's so cool they're getting to do such nice stuff. (Hannah)

...because you want them to want to be you. But, um, I think that's also why people post too much stuff on Facebook, so people can feel envy... that you want to be that person – that you wanted to do that... (Lydia)

...when it's coming from people who are similar to you – that's the thing, that's a huge thing. Because it's almost like you feel like you could swap places with them and insert yourself into their life... it almost just leaves you feeling very disappointed. You know? Like you, you've wasted your time and there's nothing you can do about it now. (Hannah)

...people over exaggerate... I mean, things like filters... on Instagram, you make things look amazing, but... it was, you know, just pretty normal what you did... and everyone just tries to make their lives look magical and fun and... try make people, I don't know, jealous of them, want to be like them. (Katie)

Thus far it is fairly evident that individuals like to portray themselves and their quality of life in as positive a light as possible. Two reasons as to why this is done is to (i) invoke envy and (ii) a desire for a peer to want to live your life. However, one might question whether or not this is not fundamentally flawed. As revealed in the two secondary sub-themes below, the image that one impresses upon their peers online is not always believable, nor is it made evident in face-to-face interactions.

5.4.1.3 When you meet them in person, they're completely different. As is made very clear from the title of this secondary sub-theme, the image that one portrays of themselves online is not always cohesive with how they present themselves in person.

...it's giving people this opportunity to present a completely fake version of themselves... then when you meet them in person, they're completely different people. (Hannah)

I think these days you always stalk people, like in Facebook. So, you gonna meet this guy and everyone's like, "He's cute," whatever and you look him up on Facebook. And then you meet them and they actually can't talk to you because they're so shy, but on Facebook they all like confident... (Katie)

...a lot of friends of mine at least that I know have like a whole different sort of persona or personality online on Facebook than they do in real life. (Thomas)

I think people also put on Facebook something they're not...they are greater than they are... a better friend than they actually are. ...But when it comes to real life, then like pushing comes to shoving they don't end up doing it (Lydia)

5.4.1.4 Too good to be true. Similar to the recognition or acknowledgement that many online presentations differ substantially when the individual is met in person, so too does this subtheme consider the possibility that the images and emotions created and expressed on line, are not necessarily true reflections of the individual. A further consideration is whether the portrayed image is believable by the individual, and what underlying emotions exist which this 'false' presentation is covering up.

...on Facebook for instance or a Whatsapp status... they just seem too happy to be true. And then you kind of get this underlying idea of "Are they really happy?" Friends of ours...she kept on posting stuff like "Oh she is so happy in life, and she is so blessed"...but it was almost too much, like she was trying to convince herself more than other people. (Lydia)

...it makes you appear cool or whatever if you put things on and then people get this perception of you. But then most people can't live up to it, 'cause they're not like that. And it's just false basically, false advertising. (Katie)

I can't imagine anyone can truly believe that they are the people they portray themselves to be without being aware that they not that person. I mean that, that doesn't make sense to me. And I think that that can lead to a deep seated depression... (Daniel)

5.4.2 You feel like you've got to

In light of the information that has thus far been provided by the participants, one further element of image display is revealed. It is beginning to appear that, possibly, it is considered so normal to boast about one's life on various CMC platforms that it may have become an expectation. In this sub-theme, elements of felt social-exclusion, or not conforming to the status quo, might well be driving factors in individuals image portraying and displaying behaviour online.

...when you look at someone else doing it, you know they advertising their love life and their friends and, like, it's just such irrelevant things that the world doesn't need to know, but you feel that you've got to share it... [so that] the world sees you happy. (Briony)

...because everybody is putting on this fake impression, you think that everybody else is happy and that there must be something wrong with you if you're not... (Hannah)

...updating on Facebook has tended to become a habit now, or people are addicted to it. Um, just in the sense that "Oh, I have to put this on Facebook... I have to do this, I have to." Ya, I think people do it more and more and more just 'cause it's what's expected basically – everyone does it. And if you post something once in a month it's like you're not doing anything with your life. That's the general perception that people have. (Nicholas)

I think if you don't have a lot of friends... you kinda use social media to pretend that your life is ok... 'Cause that's the norm, you have to be...someone fun and someone sociable, someone... appealing... Everyone is kinda trying to strive to that ideal that society has set for us but if you don't have that personality normally, you... try to achieve that through social media. (Christina)

...you're being exposed to so many different opinions and ideas about certain things you start letting that brush off on you. So your opinions are no longer necessarily your own, you start buying into the social perceptions of how things should be... they just start building into the way that society says I should be seen and that's also quite frustrating for me, because I don't. I don't really find I buy into that, which can also lead to people thinking you're quite weird. (Daniel)

5.4.3 Just letting the world know

A central finding in understanding why people so frequently change their status, or post pictures of their current activities, is quite simply just to show people what they are doing, and letting them know what their thoughts are. Often times this is linked to the notion of projecting the image of having a better life, but also serves to keep your broader social network informed about what is happening in your life.

“We went to this place, we cycled this race and we went up Table Mountain and, oh, I just made a beautiful apple pie”...they putting what they do, where they live, almost like a mini bucket list on Facebook...young people are more, um, see me, see what I’m doing, I’m better than you are! Because this is what I have... you project this image of “you want to be me” and I think that makes a lot of people feel wanted, it makes them feel better about themselves (Lydia)

I think sometimes you just very excited about things and you just want to share it with everyone and it just makes you feel like if everyone knows about it, I don’t know, it just heightens the event for you. (Katie)

I suppose I sometimes do think of myself as a bit of a recluse in the sense that I work a lot and I don’t participate in this whole social media display of my life. (Daniel)

A status update... it’s very instant, it’s what is happening now. So, for instance, two weeks ago I just posted “I just climbed Table Mountain”, so you just letting the world know what you doing, where you are. (Lydia)

...with Instagram where you... it’s all about sort of your photo journal of what you're doing every day. I think it’s definitely developed into that and with all these filters and everything I mean people are obsessed about getting their photo just right before they put it online... so that they can get sort of an Instagram following. (Thomas)

...it’s like catching up with people basically. Like if you scroll through a news feed, it’s like, oh, this person is doing this... it’s just to update everyone what's exactly happening and to share memories and moments basically. Ya, like if you upload a photo at a specific time, like “I’m here”. Just so that everyone can see... [and] just know what's going on basically. (Nicholas)

I do post on Facebook. For instance, photos that you were at this hotel having high tea with someone... that’s fine, that’s when people can see who you are, what you do, what you love doing in life. (Lydia)

5.4.3.1 Living the moment. However, while there may indeed be many advantages, there are also recognised faults, such as the one mentioned by Luke:

I think people aren’t enjoying the moment anymore. Because you constantly thinking of the next photo or... the next followers... but it takes away from the moment in terms

of just appreciating it. Because then it's not so much about what you seeing – it's about what's on your phone. Or what other people are seeing. (Luke)

5.4.3.2 Keeping tabs. One element that is strongly linked to this secondary sub-theme, yet distinct in its own right, is the popularity and normality of “Face-stalking”. This is a phenomenon that has been frequently cited in research, and includes this ability for one to know what is going on in their friends and more distantly related acquaintances.

Facestalking someone especially if you have a crush on someone and you like going through the photos and if they post something new on, for instance, if they in a relationships and you see that it says they single... then you're like, Yesss! So, you do keep tabs and stuff you do want to know what's going on in the world... (Lydia)

Facebook is... this huge gateway that just allows you to super stalk people like, to great degrees, and some people are very relaxed with their privacy settings and you can just look at all their stuff. It allows you to sort of like see into peoples' lives, and gather information... you're keeping tabs on everybody in your life... (Hannah)

I think that there's a level of stalking that is sort of accept and I think that it's not the worst thing in the world because that's what Facebook generally is for, it's for people to go and look into your life... (Thomas)

...I think that that is a great way to keep in contact with people and also to see what's going on in their lives. (Simon)

...let's say I go onto someone's Facebook profile and I can see there's a lot of activity and stuff, it's not really that I think they have a fulfilled life, but it makes them more interesting. (Nicholas)

5.4.4 You looking for that attention

One's desire for attention, sought by use of different forms of CMC, was an element mentioned frequently by participants. Included in this primary sub-theme is the concept of the Facebook “like”, and more substantially, the notion that people feel validated in terms of their opinions and activities once they are displayed and acknowledged (that is, in the forms of “likes”, comments or “retweets”) on social media platforms.

...people feel that need to be important, because we feel like we need to make friends. You need to be important to other people for your life to have meaning... They're looking for this attention, they're constantly looking for this like, "Ooh, how many 'likes' can I get?" ... they want that attention, they need that validation from other people (Hannah)

...you do feel like nobody has listened to you if nobody 'likes' it... it's really sad that you need someone's approval... (Lydia)

...you put a picture on Facebook, you want it to be 'liked'. You tweet something you want it to be retweeted, it's just like you looking for that attention, and I feel like ... you see someone else has all this attention and they are so awesome, so... you try to make yourself look better, you try to have a better life and you want people to know that so they can think you are this awesome person... (Briony)

...it's quite a popularity thing and you want people to like notice you and know what you doing... (Katie)

I either make a status if I'm looking for attention from a certain individual or individuals, or if I'm just trying to up my social rep... (Charles)

Someone who's too vocal on Facebook... it's unnecessary... because it shows that they aren't getting enough out of life by just enjoying it themselves, they need other people to enjoy it as well. (Luke)

5.4.4.1 Everyone wants to be heard. This desire for attention is explained to a certain extent by underlying notions of a felt need for recognition. This need for recognition is possibly an outcome of larger societal factors that drive individuals to highlight aspects of their selves, but also from possibly an unstated need for approval. Terminology that largely contributes to this sensation of needing to be heard include the terms 'follow' and 'following', which are standard to various CMC platforms such as Twitter, Facebook and Instagram.

I think everyone wants to be heard, that's one thing. But I also think everyone wants to feel extraordinary. And I think Facebook has given us that platform, you know it's not just the Kim Kardashians that can be heard and seen, and if you've got people following you and these people...hear what you have to say. In that little moment

when you post something you are the centre of that post and the centre of that universe, you are Kim for a second. (Abie)

I think it's just that celebrity effect, and to...just want to feel important... (Luke)

...people have always wanted to be interesting, because nobody really cares about boring people. And I think that social media has just given them this instant way to be interesting... (Hannah)

5.5 Theme 3: People feel braver

Table 5.3

Overview of the third theme, with the primary and secondary sub-theme components

Primary Theme	Primary Sub-theme	Secondary Sub-theme
People feel braver	When people are on Facebook they feel more anonymous	<ul style="list-style-type: none"> • People are way more comfortable on their phone
	They hide behind this screen	
	There are misunderstandings	

This third theme has revealed an interesting aspect of the research: the fundamental elements of communication have changed substantially since the advent of the smartphone. As such, participants have indicated that they prefer communicating via CMC for several reasons: namely, they feel a sense of safety and are more comfortable. Social competence and confidence was, according to the student participant group, a prominent component of their social media use. By utilising CMC in interacting with one's peers, there is a felt sense of security and as such, enhanced non-verbal communication and interaction. Furthermore, as a consequence of this security, there appears to be an increase in self disclosure, as indicated by the participants.

This theme facilitates understanding another dimension of why CMC is given such importance and occupies so much of one's time. Included in this theme is the element of enhanced confidence or 'bravery'. As seen below in the quoted excerpts, individuals are provided a safety net by interacting with others via CMC platforms:

... sometimes you actually gain good information. For instance, if a friend is feeling down you can find out why that is, 'cause they wouldn't tell you face-to-face... People feel braver on social media, especially Whatsapp... I remember when I was so cool and you feeling brave... (Lydia)

... and you see how people, if they were talking to you in person, they would never have the guts to say those things... you know, because they are far away, you can't punch them in the face when you read it, so it gives them this, like, instant bravery and I think that's really bad because, like, then people are used to sort of acting that way and then when you meet them in person they're completely different people. They don't necessarily know what is an appropriate way to behave when you're talking to somebody in person... (Hannah)

The element of bravery, or enhanced confidence, is, as made evident in the quotations above, largely due to the presence of time for one to edit and reflect what they are writing or sharing with another (or others) via CMC, as well as a lack of face to face contact. Additionally, as such one is not faced with immediate repercussions for what is placed or written online and thusly is not confronted with the consequences or reactions by others immediately.

...people are a lot braver on social media... because it's not face-to-face. (Lydia)

...it's easier. I mean you not really put on the spot in terms of how you react and that you can really think about your reaction, what you're going to say. (Sarah)

This last excerpt of Sarah's is key. The fact that one can rephrase what one wants to say, or reflect on what their desired reaction, certainly changes the dynamics of interpersonal communication and can therefore be linked to the impression management of individuals as discussed in the second theme.

5.5.1 When people are on Facebook they feel more anonymous

The safety behind the screen and the felt sense of anonymity due to a lack of FTF interaction is herein made evident. Although the title refers specifically to Facebook, the sense of anonymity may be extended to all platforms of CMC in which individuals do not communicate FTF.

When people are on Facebook they feel like they're more anonymous, or more untouchable – it's almost like there's no reaction for the things they say and the things they do and they don't realise it still has an effect. (Hannah)

So, I think in that aspect people are a lot braver with what they put on Facebook, um... because it doesn't have the face-to-face aspect. (Lydia)

But I don't know why people feel brave it's... it's the screen. It also happens especially on Mxit if you talking to a cute boy you like... and he's saying so much stuff to you that he never talks about and then you come to school and then you like, "Why you so quiet? Why don't you speak to me now?" Um, I don't know, I think it's because it's not a physical face that you're looking at. Skype is also quite intimidating if you looking at someone's face you don't want to say something wrong. (Lydia)

... when they on their phone... they don't screen as much as they say as in real life. (Nicholas)

... there's still a line that you don't cross unless you know someone well enough. That line gets blurred on social media, because... the anonymity thing – you can disclose things without feeling it's a personal thing... (Daniel)

5.5.1.1 People are way more comfortable on their phone. Not only did participants express a felt sense of anonymity, but that they were more comfortable communicating via CMC because there no 'threats' that can be present in FTF communication exist. This may furthermore link with the editing and controllability that is afforded by CMC (See theme four).

...a lot of people are way more comfortable on their phone than in real life. (Nicholas)

...you find that a girl that you've been messaging for a long time on your cell phone... they feel more secure in themselves, they willing to, uh, to just tell you more about themselves. (Luke)

...it's amazing how people... would rather sit on their phones than talk to people. (Abie)

5.5.2 They hide behind this screen.

Participants regularly referred to the screen of their mobile phone or computer as something which offers them a sense of security or comfort, and figuratively speaking, something behind which they can hide. In this regard there is a notable change in the way people communicate with one another and the role CMC plays in this change or paradigm shift is highlighted.

It's one of those [things]... would you have said this or posted this or whatever, commented this if you weren't behind the screen of the internet... you posted it now, but in real life would you have had the guts to say it? (Katharine)

Closely linked to this sense of safety behind the screen is the element of enhanced self-confidence, which has previously been mentioned:

I think your, um, your persona on social media is very different to your real self. I know I'm a lot more confident when you're talking to someone on Whatsapp. You're a lot more confident with what you say. (Katie)

...I've heard of a lot of people, um, that its, they have like this entire Facebook account and they make statuses and they kind of live through that because they're not confident enough to speak to you. You know? So, uh, I think it's kind of a confident booster to a lot of people. (Christina)

I think people are definitely getting more...confident... um, which is obviously an illusion, I mean I think the problem is people don't realise that there are consequences in real life about what we do on social media... (Sarah)

However, it is also important to take into consideration the fact that individuals might become overly confident, and as such CMC may be used as a means of engaging in conflict and as a preferred means of solving problems:

... a lot of people think they, or they prefer solving their problems using their cell phones because it's easier to write someone not facing them... (Christina)

... you get certain situations where you've said something which the other person has misinterpreted and then they get upset and then they come back at you with this kind of confrontational message... And suddenly you feel over confident with what you can say, it's like "What I'm going to say now is now has no repercussions. I don't need to

say it to this person face to face so I feel like a lot of people use that, they hide behind this screen to voice their expressions... (Daniel)

... with the whole screen safety thing it is definitely easier but, um, the problem is that there's no real filter. You typing it out and then you press the button, it's gone. (Charles)

... you always connected to everyone and everything right now, so you could hear anything right now, there isn't, there's almost not an appropriate time to tell you something. You could hear anything right now and it could change your whole mood, your whole day, so that could be one thing. But then I also think there's also tension in the fact that you have cut yourself off from the world, I don't know the people that are so glued to their phones, how they really do cope when they have to just deal with people in the flesh. Uh, I think that can cause a lot of anxiety... (Abie)

5.5.3 There are misunderstandings

As described in the excerpts below, there is an awareness among the participants that often what is written may be misinterpreted by the reader. As such the message is often not accurately relayed and may additionally result in misunderstandings and conflict. Central to this finding is the lack of non-verbal cues, such as facial expression, tone of voice, and body language.

Obviously a lot about talking is not just the words that come out of people's mouths but the way they say it and their facial expressions and whatever, and obviously that's not there in a text message... (Nicholas)

Um, but I do feel that sometimes messages... uh, how should I put it, you don't have, um, like communication... verbal communication is only 7% of communication, the rest is non-verbal, like voice pitch and body language. Um, you don't have that aspect so sometimes there are misunderstandings but for instance I would say something and it could be taken up rudely or very nicely. (Lydia)

...people don't pick up your sarcasm, in that way it's very easy for them to find it offensive... (Briony)

Thus, the way individuals communicate among themselves has certainly changed; cues that are typically used in FTF communication are not always possible in these prevalent

CMC contexts. As such, CMC can be referred to as cue-limited or cue-poor interactions. Individuals often expressed a preference for communicating via CMC in a variety of contexts, due to feeling more confident or because there is an element of protection or safety behind the screen. However, they also indicated the draw-backs in the cue-limited environment of CMC.

5.6 Theme 4: A way of escaping

Table 5.4

Overview of the fourth theme, and the primary and secondary sub-theme components

Primary Theme	Primary Sub-theme	Secondary Sub-theme
A way of escaping	It's a lot more difficult to talk to people in person	
	Society creates this stigma that it's not okay to be alone	<ul style="list-style-type: none"> • Everyone in your pocket
	You're not really doing life anymore	

Discussed in theme three is the use of CMC as a means to boost one's social confidence, such that one is typically less inhibited in disclosing personal information and engaging in interpersonal interactions. In this fourth theme, the dimension of using social media and media technology as a means for escaping is reviewed. While not entirely dissimilar to the third theme, the distinction lies within the use of CMC devices to avoid social contact with others in person, or as a means of satisfying one's desires that are not being met by their present context. Such an example might be that although they are not surrounded by their friends, they have access to them through their mobile phone.

I think it's an escape, um, I myself am very guilty of that as well. Like, if I'm trying to avoid someone or avoid social interaction, or um, ya, then like I'd be busy on my phone you know. It's just, ya... It's preventing you from actually, um, facing your feelings... If you feel awkward then you can, ya, if you not comfortable walking into a room and sitting down next to someone and starting a conversation, then your phone's definitely an escape. You just pretend you on your phone – “Ya I'm very busy, sorry can't talk now”.
(Charles)

...I live with three guys and we don't really speak if we sit around the table, you, like, on your phone busy speaking to someone else and you actually too scared to say something to them because then like you know a conversation...um, so, ya, I don't think you realise how much communication on devices have taken over your life... (Christina)

...especially if conversations are getting awkward, it's almost a way of escaping it, I don't know if you've noticed...or if you don't want to greet someone you just like quickly make is if you on your phone... you walk past them and it's all over. There is actually an app that gives you a fake call if you want to escape an awkward situation... ya... a button you press thanks to the app and it will give you a call and you like "Hey..." and just walk away... walk away... (Lydia)

I just use it as an escape and I'm not present, I'm not being mindful at all. It's, ya, I don't like it and I, it, um, it's, ya, once again it's like an escape of reality you know, you not...I could be doing so many more useful things if I'm just mindful and present... (Charles)

...sometimes if I'm in that kind of situation I take out my phone, if I see a person I don't want to engage with at the moment... (Sarah)

It has thus far been mentioned by the participants that they regularly make use of their mobile phones so that they appear engaged in an activity, and as a result they do not have to interact with individuals that are in their present surroundings. Support for this notion of avoidance is provided in the secondary theme below.

5.6.1 It's a lot more difficult to talk to people in person

As the title of this secondary theme so boldly states, participants clearly indicated that there is both intimidation and uncertainty involved in offline, FTF communication and interaction. This is unpacked in the selected quotes below:

Like, the other day, we were waiting in a corridor, waiting for class and, literally, we were all just sitting on our phones, using the Wi-Fi because it's a lot more difficult to talk to people in person, you don't get given that, you know, like if you get a Whatsapp message you can sort of look at it and think for a while, "How do I want to say this, that it's gonna sound this way and not that way," but when you are talking to somebody in person you can't just sit around for a minute trying to decide how you want to say

something. And I think that the use of like technical communication has really worsened people's face-to-face communication skills. (Hannah)

...you don't have to engage with people you don't know when you on your phone... because you seem to be busy... I think almost in that way social media makes us more insecure around people... [People] have the feeling that they need to create the perception that they do have friends just because they standing in a random queue, why's it so important in that setting to kind of, like, let people know I do have friends? It's a funny thing... I think it definitely has become a tool for some people to almost avoid personal contact with other people... So it almost, it's gonna make you more lonely and more miserable in that way. (Sarah)

...you see people just sitting together and on their phone, like not speaking, but...I mean it's a very social campus... (Briony)

...if you're in a group and you don't feel comfortable speaking, the first thing is take out your phone... (Christina)

I think it distances people a lot... I mean I was without a phone for six weeks now and, like, I loved it. 'Cause like... it forced me to like talk to people but unfortunately they still had their phones as well. So I mean, um, you get people that like use it to keep the distance in between people and have interaction, because the face to face interaction would be something they're very uncomfortable in. (Charles)

5.6.2 Society creates this stigma that it's not okay to be alone

It has been made evident that the participants expressed a preference for communication that occurs via social media. However, there is another crucial element that plays a fundamental role in individuals' use of CMC, namely a discomfort in being alone. Such feelings of discomfort in being alone stem from a felt societal expectation that it is neither socially desirable to be alone, nor, as indicated in the quotes below, is it considered to be socially acceptable. This was expressed by all participants, shown below.

I think a lot of people... they want to impress everyone around them. So, for instance, if you stand alone somewhere... then the most natural thing these days is you take out your phone to make sure people know you do know people and you're not like there

alone... I mean, you don't just sit around and look around, it's just really normal and Facebook is actually such a great way to get time to pass... (Christina)

...that's exactly what happens on a day to day basis, when you don't know what to do, people aren't comfortable just sitting on their own anymore. If you're waiting at a coffee table for someone to join you, pull out your phone because it gives you something to do. (Daniel)

...there's, like, this whole concept already in everybody's minds that if... you on your phone, you probably talking to people, so you're not technically alone. I mean if you're standing there and you're alone then it's like, "Ah, okay, shame she has no friends to stand with," like, actually there's people who actually think like that... If you talk to somebody you not alone, so I think not having your phone would classify... you as alone. (Beverly)

... if I get into a situation, say a waiting room somewhere or an awkward situation when we all in an elevator for a really long time, the first thing you do is whip out your phone, because you at least just want to look busy so you don't have to look at somebody else. Forget what you're actually doing on here [the mobile phone]...people aren't really that busy but that anxiety of interacting is also, this [the mobile phone] has become a little pacifier for it. (Abie)

... 'cause I'm a smoker as well and I feel more comfortable... it's not really like a security blanket but... If I'm alone waiting for someone for five minutes I have a cigarette or I'll be on my phone. (Nicholas)

The first thing you do... when left alone is go to [your] phone. I mean you've got fight that urge... Obviously each person wants to do that 'cause you afraid of insecurity or being by yourself... you'd rather be seen on your phone as opposed to sitting by yourself. (Luke)

5.6.2.1 Everyone in your pocket. As mentioned above, in order to escape feelings of inadequacy or the awkwardness of being alone, individuals very regularly turn to their mobile phones. Below are two quotes that readily identify a reason for why individuals frequently prefer to engage with individuals via CMC than by confronting the unknown.

...you never completely alone anymore, there's always all your friends or everyone you know in your pocket. (Nicholas)

...you're comforted by your phone in terms of people in there, but they actually aren't in there. (Luke)

5.6.3 You're not really 'doing life' anymore

The title of this subtheme stems from the notion that if one is permanently escaping their own insecurities and moments in which they might feel either awkward or challenged, that it may indeed result in not engaging with their present context.

I think a lot of people are actually missing out on what's actually happening in real life. (Katie)

I'm guilty of it every now and again, when you walk past people and someone literally walks into you because they're not looking up, like, I'm amazed that we're actually not run over because people actually cross the road and they're on their phones and people are going up the stairs and they're on their phones, so you're not really doing life anymore, I mean, you don't really see what's happening around you anymore. (Abie)

I would say that they kind of do get cut off from the world because you see people walking from class to class on their phone, um, so you, you actually don't take in your surroundings. (Christina)

... a lot of the time I feel like that. I feel, like, left out and just alone because people are too busy on their phones ... And it really does make you think because there's so much that's going on around you that you're just missing out on. (Katie)

Made evident from the excerpts above is a sense from the participants that they are, by always engaging with others on their mobile phones, not fully experiencing that which is happening around them.

5.7 Theme 5: A big distraction

Table 5.5

Overview of the fifth theme and the primary and secondary sub-theme components

Primary Theme	Primary Sub-theme	Secondary Sub-theme
A big distraction	I go on my phone in lectures a lot	<ul style="list-style-type: none"> • If you are a bit bored/ just to keep yourself entertained • I just think it's very rude • I end up falling asleep in my lectures
	It's so easy to get stuck in there	
	You just waste time	
	Social media is what I procrastinate with	<ul style="list-style-type: none"> • It's like an OCD thing
	You have to set boundaries for yourself	

In light of the themes which have thus far been presented, it becomes necessary for the researcher and the participants to provide further explanation and understanding of the outcome of such regular CMC use.

As the title suggests, what all participants reflected on in their interviews was that, although the advantages of CMC use may be numerous, and that there are rewards to be gained by engaging in its regular use, there are also drawbacks. Primarily, it was indicated that CMC use serves as a distraction among students, especially when it comes to fulfilling academic coursework requirements.

...if I have to study I'll go put my phone in my drawer and, like, turn it off so that it doesn't distract me because it's bad... also, if I'm, like, using my laptop to look at slides or whatever I'll usually end up going on Facebook, so I try to stop myself from doing that but it's hard. 'Cause... it's right there and it's so easy to just do it. And it's so distracting, 'cause it's so much more fun than what you're doing. (Katie)

ADD has surged incredibly and the amount of people using Ritalin and Concerta for day-to-day studying and they say, "No, I just can't concentrate," but they studying and they picking up their phone every five minutes and not getting into their work; well, there we go, there's a problem. No one's focusing on anything for any period longer than half an hour... it definitely is a distraction, um, especially with groups. We've got a law class group with about fifteen of us on it... We swop notes...and

help each other out, but when people are studying...someone will ask a question and then it's just like a hundred messages in a row with everyone's different ideas and... the little red light starts flashing and you can't really concentrate. (Daniel)

...you want to print some notes [in the Library]... And you will end up spending an extra hour or so because you went on Facebook. I mean, you can't really blame anyone else for going on Facebook, because you have to literally type w-w-w dot facebook, log in to get there, so... it's a temptation... (Thomas)

It's a scape goat, "Oops, uh, Emily just messaged me – oh, Andrew as well"... "Oh, I'm not gonna do work – oops, I forgot to do my work". It keeps you away from a lot of things in your life. (Charles)

...people tend to use their phones and Facebook and whatever, it's because we can't concentrate on a specific thing anymore... that we can't prioritise things anymore. So, social media kind of, like, just distracts us from doing such a lot of things. (Sarah)

...you definitely constantly tempted with your phone...your phone is like the biggest thing that probably would tempt you to do something else. (Beverly)

5.7.1 I go on my phone in lectures a lot

As indicated in the above statements, students are distracted from studying by the desire, or social expectation, to use their mobile phones. Students expressed that they are equally distracted to make use of CMC while attending lectures. Below, several of the participants mention how they additionally found both their own mobile phone use, and that of other students, to be a distraction in lectures.

I mean, I go on my phone in lectures a lot but I don't know why 'cause you don't pay attention at all if you're on your phone, like, you don't - you're not listening, you not taking anything in. I know I'm not, so it's really bad if you think about it, it's a waste of time to be going there... (Katie)

...there's not been one class since I've started at varsity where I haven't been able to look down in front of me and see people playing on their phones or myself playing on my phone. I think in every class [for] at least five minutes or ten minutes where I'm sitting on my phone playing stick cricket or something ridiculous... (Thomas)

...the class is an opportunity for you to actually get to know the work. So, if you're not able to prioritise listening in class over your phone, that's a problem, I think. Um, on the other hand it might actually be reflective of how good the lecture is, unfortunately. I mean, obviously if you feel you don't gain anything from listening I think you would be more inclined to be on your phone. (Sarah)

5.7.1.1 If you are a bit bored/ just to keep yourself entertained. This sub-theme facilitates one in understanding why students use mobile devices during class. A central finding was that classes are often deemed to be boring and that accessing CMC or a general Internet search not only relieves the boredom but also offers a more entertaining way of spending one's time. Herein lies another aspect of students in the lecture environment, namely that they are unwilling or unable to focus their attention and concentrate on what the lecturer is presenting.

People are always, well, most of the time people are just under the desk on their phones when they get bored, which is all the time in lectures. So, and people are like snap chatting themselves in lectures and taking pictures of the lecturer and stuff... (Katie)

And you sit in class, you in a lecture, people will... and I, I mean I do it too, I'm not saying I don't do it at all, it's just what happens. People are losing focus; people are losing the ability to invest their concentration and time into anything in a meaningful way... I've seen people on their iPads and computers where they'll be typing, and next minute they'll just open Facebook or open some website and then five, ten minutes they'll do whatever they do... and then they'll try and focus again. Now you've lost the flow of the lecture, now you don't know what's going on... [So] people are putting more pressure on themselves to study outside of class. (Daniel)

But the minute that you ... not focusing on the lecture, you on your phone. (Beverly)

...if you're not interested in a class I think you generally tend to use it a lot more, um, just to keep yourself entertained. (Nicholas)

...a lot of people on their laptops and taking... on a Tablet or whatever... Um, they also need, we do what we not allowed to do, but what we do is a lot of times we take pictures of the slides...Um, we have a group, a law friends group, um, which we would take pictures and someone would say... I would take a picture and then my

friend would be “Hey, I didn’t get the last five sentences, please will you post the slide on the group. Um, and then obviously a lot of people would, if you are a bit bored or just distracted or maybe like I am, grab your phone or whatever. (Katharine)

5.7.1.2 I just think it’s very rude. Not only is the student potentially compromising their *own* learning by not focusing their attention in the lesson content, they may also be distracting those around them. This sub-theme component reflects student’s thoughts and experiences of their peer’s use of CMC in class.

I do get distracted by people on their phones. I personally think it’s quite rude. But also sometimes people are really inconsiderate, you know, like “I don’t want your noisy phone going off while I’m trying to listen to my lecture”... (Hannah)

...you see people always, like, sitting in a lecture on Facebook. Like why are you in the lecture if you’re not going to listen? (Briony)

Like, you know it’s wasting all of our time... plus people, ya, they’re, they’re very distracting with their phones, and I, I mean I’ve seen kids that literally just sit in class playing *Candy Crush*. And you know, that’s, that’s their choice, that’s fine... I’m one of those kids that sit front and centre because I’m here, I want to hear the lecturer properly, I’m gonna focus and pay attention, don’t sit next to me if you’re gonna sit on your phone the whole lecture, go sit somewhere else. You know? They’re very, very distracting and then even though they’ll often be on their phones they’ll want to, because of that need to show that they have cool stuff they’ll want to show it to the person next to them and then they’re like talking and making a noise... I just think it’s very rude to the poor person who’s presenting. (Hannah)

5.7.1.3 I end up falling asleep in my lectures. It has thus far been made quite evident that students certainly do make use of their phones during class, regardless of whether or not it is to their detriment or distracting for others in the class. However, it is important to note that students may not only be distracted by their CMC devices during class but that the use of them late into the night might further disrupt their attention. Moreover, students are increasingly finding media technology and CMC devices incorporated into class, sometimes even being a requirement.

...‘cause you not paying attention at all. I think, I think tuts [tutorials] are better though ‘cause it’s a smaller class so people usually don’t go on their phone... But

some people just don't care so they just go on anyway... Um, but I see like they trying to even integrate it into our things [classes], like I had a linguistics tut this week and then they said "Okay you need to use your phones for this, you need to look up these words". So, they actually trying to integrate it, they were like "please bring your phone", which was, I don't know, that could be a good thing, or a bad thing, I don't know. (Katie)

...it takes your concentration off like in a lecture. I make a point to pack my phone in a bag, or um...if we have to do the 'clicker' tests... in chemistry I would actually just take my laptop or Tablet to do it... otherwise I know I would go on Facebook or Twitter if I'm not listening. Because obviously you don't want to listen to the lecturer, 'cause sometimes it's not interesting, 'cause they talk at the same tone and they don't have expression in their face. (Beverly)

I think, even myself, I stay up very late sometimes, just on social media, when I should actually be sleeping 'cause I've got varsity tomorrow and then I end up falling asleep in my lectures. Which I shouldn't really be doing, so that's negative, and like I guess just being detached from reality. (Katie)

5.7.2 It's so easy to get stuck in there

Students clearly find their CMC devices to be a distraction both during class and when studying their coursework for examinations or tests. In trying to understand how and why it proves to be such a distraction, and why time is so easily lost on these devices and platforms, the following explanations were provided by the students:

...One thing generally leads to another, you know like, "Ah, let me just check if so and so's responded to my message yet. Oh, they haven't but look! Ah, look at that!" ...you know, and "Oh this person's online and I have three notifications, let me deal with those"... But on Tumblr, everything's interesting, and it doesn't end, so...that's when the hours fly by... when you click 'log off' they ask..."Do you really want to log off?" and I'm like "No, I really don't, but I have to do other things." (Hannah)

...it's so easy to get stuck in there, so you, you study for example, I take a study break and then you think okay I'm just gonna check, you know, whatever, some news site, see what's happening, and then you do go onto Facebook, and do a lot of other things and then it's just been half an hour or an hour that's gone. (Sarah)

...you know you supposed to be studying and a lot of the time I would just be like “Ok, I'm just going to go on Instagram for five minutes, and then an hour later you're like, oh shit... If I'm on Facebook... I'll say like, “Okay I'm just gonna watch one more video” and then 2 hours later I'm still doing stuff. And I'm so tired but I'm not going to sleep... I think it can definitely throw your balance off kilter, because you should be... doing your work, having fun as well, you know getting enough sleep, exercising, eating, whatever... but I think that it can definitely just ruin that... (Katie)

You think I just quickly want to check that, and ... Facebook ... and Twitter really [are] one of those places – where you find yourself scrolling down because you saw something and then you actually forget that you actually just came to check a message or you quickly came to update a status. (Abie)

You completely lose track of time because you so much into a screen... (Lydia)

5.7.3 You just waste time

A primary finding among the students was that the time spent using social media and interacting on different CMC platforms is considered as time that is wasted.

A lot of sleep has also been lost I think, chatting to people, especially if they have got problems because then the Whatsapps get so long...and you just keep talking and talking and talking. Where that whole conversation would have taken place in an hour you spread it out over two hours... especially with news feeds and groups, you just keep scrolling and scrolling...seeing what other people are doing... So, I think you just waste a complete load of time... (Lydia)

...I can spend hours just on YouTube or on Instagram, I can do it myself and it's just like such a waste of time, it really is. (Katie)

...it's kind of like a bad habit as well. You don't think about doing it and why you do it, it's just, you just do it. So it's really unnecessary time that you waste. (Sarah)

5.7.4 Social media is what I procrastinate with

Additionally, students may actually choose to use these devices in order to let time pass or instead of performing other student-role related tasks. The underlying finding in this regard was that social media provides one with the perfect tool for procrastination. The

majority of participants shared these sentiments, which are emphasized by the following quotes:

I think being a student we're all really professional at procrastination, that's the one thing university has taught me, is how to procrastinate. Um, so, ya, if you go on the internet that's a really good way of procrastinating. (Christina)

... social media is a brilliant way to distract yourself from what you should be doing but don't feel like doing... (Sarah)

I'm a procrastinator and usually social media is what I procrastinate with. (Katie)

...it's a big procrastinator...so obviously it reduces people being productive or concentrated. Um that's a major issue... (Nicholas)

5.7.4.1 It's like an OCD thing. Procrastination and avoidance plays a substantial role in students' use of CMC. However, in light of many themes and sub-themes already presented, there may well also be an element of CMC use that is performed without conscious control.

I would say my phone is controlling me 'cause if that red dot goes off on my Blackberry, I'm like, "Oh what's that?" (Beverly)

I'm like one of those people that when the red light flashes I have to check it, it's like an OCD thing. (Briony)

... at this point it kind of feels sometimes like people are controlled by their phones. (Abie)

5.7.5 You have to set boundaries for yourself

Evidently, the potential for social media to be a tool for distraction is widely documented by the students, and consequently they have had to learn ways in which they might be able to reign in their CMC use. In the excerpts below are ways in which students have found ways that benefit them in focusing on their university tasks and becoming resilient to the temptations of their mobile phone. It is furthermore important to mention that students are not only kept away from tasks of academic significance, but also social and domestic engagements.

...my friend [had] to keep my phone because ... “Oh Jane’s on, I should speak to Jane now. Oh Leigh is on, speak to Leigh. ” So I think that’s the problem, you do get distracted by just looking at it because you can think of better ways to spend your time, even though you should be studying. [And] I feel guilty! I feel like I could have spent my time somewhere else. (Lydia)

...you can waste your whole life on Tumblr, it’s horrible! But ya, you can lose hours of your life, it’s very scary... (Hannah)

I have figured out ways to keep myself from doing that... I would put it away or put it in the other room, so that I can focus...It’s not rocket science to switch your phone off but some people don’t do it. And it really does make an impact. I would rather study like intensively for a shorter amount of time instead of... being on my phone... but that being said, I would also take my phone and ask someone “Do you have the memo for this or can you please help me with this?” (Katharine)

I’ve become accustomed to, when I sit down and I focus I’ll... turn my phone off. Or I’ll just put it on my bed behind me and put it on silent. Um, so I don’t get distracted by it but that also takes a bit of will power, because it’s, again, it’s not the norm. You used to having your phone with you all the time. I think it is something you have to be aware of. You’ve got to consciously want to not be absorbed in it, to not be absorbed in it. (Daniel)

...for me, it’s just simply put it on silent and turn it around and then I’m fine. But then when I’m doing like those hard yards whilst studying, and those long hours, it gets tedious. Then, ya, it does get tempting because I’m gonna get a kick out of going on my phone and chatting to someone or advertising something about my life... (Charles)

...you actually have to make a conscious effort to not look at it or put it away in the drawer for, like, three hours. (Nicholas)

What I’ve started doing is just leaving my phone at home, because I need to study; I mean, I have accepted like... the day starts and today I just need to study... But then it’s easier just to leave it at home because if you think about it nothing actually comes of value, it’s so stupid. (Luke)

5.8 Summary

A presentation of the emergent findings and the results of the present study were reported in this chapter. The prominent themes and sub-themes identified during the interview, transcription and analysis phases were presented. Overviews of each theme with the associated sub-themes were provided in tabular format, and were thereafter explained in greater detail. The five main themes were (i) Always on my phone, (ii) The image you want to show the world, (iii) People feel braver, (iv) A way of escaping, and (v) A big distraction. In the following chapter the results herein presented will be discussed in detail in relation to the literature and the Social Identity Theory (Reicher et al., 2010), which serves as the theoretical framework.

Chapter 6: Discussion

6.1 Introduction

The focus of this chapter is a detailed discussion of the research findings, displayed in Chapter 4, which resulted from the data collection and analysis phase of this research. The five primary themes, and their sub-theme components, are discussed in light of the existent literature, which is presented in the second chapter, and shall be interpreted through the lens of SIT. The results are discussed and presented in five separate themes, as they appear in Chapter 4, the results section.

6.2 Theme 1: Always on my phone

Consistent observation and regular use of mobile phones and other forms of CMC by individuals has thus far been fairly well established in review of the literature and defence for this research undertaking, be it by choice or a felt sense of obligation (Feinstein et al., 2012; Thomée, 2012). Skierkowski and Wood (2012) suggest that the use of social media and CMC on mobile phones has become an integral aspect of the culture in which young adults are socialised (Manago et al., 2012). In this regard they discuss how CMC has permeated into every facet of interaction between youths (Skierkowski & Wood, 2012). Indeed, findings from the present research undertaking were similar, and further identified a link between SIT (Terry et al., 1999) and the students desire to adhere to cultural campus norms of CMC use.

When student participants discussed how CMC was used during their day to day activities, it became evident that it occurred on a continuous basis, typically accessed through a mobile phone. This finding is congruent with different prominent perspectives in the literature, where CMC is regarded as a central element in the functioning of our daily lives (Christakis et al., 2011; Nitzburg & Farber, 2013). Indeed, when students discussed the frequency of their mobile phone use, it was expressed in such a way that, not only did they engage in and use their phone throughout the day, but that it seemed strange to think of its use in any *other* way. Mention of constant connection in this regard occurs in a variety of research undertakings, including that of Atchley and Warden (2012), Rosen (2012) and Thomée (2012). Mobile phone use, as such, may be considered synonymous with immediate access to all preferred forms of CMC (Rosen, 2012). Thus, while there is definitely

congruency between this research study and those cited in the literature, these findings indicate that the need to be connected is perhaps stronger and the role of the mobile phone greater than previously indicated.

Normative behaviours that direct and shape the way individuals use CMC and the amount of time they spend on these devices are becoming more evident in research (Skierkowski & Wood, 2012). According to the SIT perspective, identification with a social group has implications that go beyond mere self-definition; a social identity representative of a particular social group implies that one does not only prescribe to similar attributes, but also the way they should think, feel and behave (Bornman, 2004). From the statements made by the students it is likely to surmise that mobile phone use has become an expected and normative behaviour for students to engage in and, even more significantly, that it could be considered as part of the student culture (Kuss et al., 2013). Students' behaviour surrounding CMC usage has been found to be moderated and influenced by an established set of group norms (Skierkowski & Wood, 2012). Thus student perspectives in this study are compatible with findings from previous research undertakings (Rosen, 2012; Skierkowski & Wood, 2012), and further reveal the substantive role groups norms have in the student culture, and in influencing students behaviour (Bornman, 2004).

It is herein pertinent to mention a fundamental facet of the SIT (Reicher et al., 2010). According to the Social Identity Deindividuation (SIDE) model, paradigms or situations in which individuals' interactions with one another are *not* mediated by FTF interactions (that is, because they are mediated by CMC) are said to maximize the influence of social norms on individuals' social and (inadvertently) personal identities (Postmes et al., 1999). As members of a university and socially existing in the context of a university campus environment, students are inherently faced with CMC as a favourable, socially normative behaviour (Kalpidou et al., 2011); this theory has been made evident by the personal accounts of the student participants. Through observing the above-discussed results with a SIT lens, the influence of socionormative factors in individuals' behavioural decision-making is brought to light (Terry et al., 1999).

More specifically, an individual's subjective norm, which comprises perceived social pressure from a group of significant others (such as one's parents and peer network) to perform certain behaviours, plays a significant role in influencing one's own behaviour (Terry, et al., 1999). In line with these findings, it was indicated by the student participants

that they felt an expectation to have their mobile phone on them at all times. This expectation, or subjective norm, originated from two sources, namely the student's parents and their peers. The students received vexations and complaints from their parents when phone calls were unanswered and messages were not responded to. This finding appears to be in partial contradiction to research. Kuss et al. (2013) stated that university students are independent of parental monitoring. However, student participants indicated, that while they are free to choose how much of their time is spent using CMC devices and how and when they use it, that there is still an element of parental monitoring and expectation in this regard.

In terms of peer expectations, CMC is considered to play a fundamental role in student life (Lin et al., 2011), with university students being particularly susceptible to peer influence, driven – among other reasons – by their desire to belong (Buote et al., 2009; Helliwell & Putnam, 2004; Rosen, 2012). From the participants' perspectives, key elements of the felt expectations placed on students by their peers is focused into two categories: firstly, an expectation that messages must preferably be replied to immediately and secondly, that if they did not have their phones on them, allowing frequent checking for messages or other notifications, they would feel left out (Rosen, 2012).

The first element, namely the felt expectation to reply, stems from one important characteristic that many CMC applications provide: evidence that the message has been read, and an indication of when last an individual has been online. Inherent in this is an indication that, while no rules of acceptable CMC etiquette exist (Rosen, 2012), individuals expressed that an immediate, or almost immediate, response was considered normal and appropriate. A delayed or late response, therefore, is in opposition to the socially accepted norm and would likely need to be validated with an excuse. However, such an expectation does not seem unreasonable. In light of the fact that the individual had just been online and read the message, they surely could not have been too hard pressed for time to reply. In such a scenario this information would not necessarily be readily known and would thus be a presumption of the sender. Assumptions in this regard are likely to favour the socially-accepted norm. This expectation is further expanded by the knowledge that students generally keep their phones on them all the time and are permanently accessing them (Green, 2002; Pettigrew 2009; Rettie, 2005; Rosen, 2012).

However, while this unwritten rule of immediate response was acknowledged by all of the participants, many of them expressed their frustration with it. Sentiments in this regard

were related to those just mentioned: that there is no consideration of one's situation. However, often the pressure that students felt in replying quickly to a message resulted in students submitting to the expectation regardless of what they were busy with. Additionally, knowledge that the sender will know when the reader read the message was motivation enough to reply, in order to comply with what is considered normal CMC etiquette. As such, individuals' perceived subjective norms – or social pressure that one perceives from their peers – is clearly illustrated by the participants as having a substantial influence on their behaviour, regarding CMC use in particular (Skierkowski & Wood, 2012; Terry et al., 1999); thus further highlighting the link between SIT and CMC use among students.

Further support was provided for the reason why students always had their phone on them. According to various researchers such as Rosen (2012) and Brown (2013), the smart phone has become a device that allows one to do almost anything on, serving as their ultimate personal resource. Not only can it access anything that was formerly limited to an Internet-enabled home computer, the mobile phone is used to check the time and plan one's schedule; it is also equipped with cameras, alarm clocks, calculators, a note pad, and a variety of other applications and functions (Brown, 2013; Rosen, 2012). In accordance with these findings, student participants explained that their mobile phone use was so prominent in their life because so many elements required for various daily tasks are accomplished on it. Additionally, not only are students on their phone for a large amount of time, they also indicated that is often the first thing they look at and interact with when they wake up. This, however, is often not done intentionally, but since they all made use of their phones as an alarm clock, they struggled not being tempted to follow the notifications that were on their screen. Students were further inclined to check in with their social networks, wanting to find out what they had missed out on during the night, who had messaged them, and if anything newsworthy had happened (Skierkowski & Wood, 2012; Walsh et al., 2009).

Kuss et al. (2013) discuss the substantial tendency for CMC use to become a behavioural addiction in the student population, and Igarashi et al. (2008) note that over reliance and excessive use of CMC occurs in the daily lives of many individuals. According to participant accounts, the socially normative behaviours surrounding CMC use (Skierkowski & Wood, 2012) have developed even further in influencing students' use of CMC. In this regard, students referred to their behavioural use of CMC as something that is done out of habit. Thus, while its use may initially have been driven by social pressures to fit in and abide by CMC behaviours considered normal among the student population (Kuss et

al., 2013; Skierkowski & Wood, 2012), that is not the sole cause for its extensive use. Student participants described their use of CMC as something performed out of habit and also described it as having addictive qualities. These findings largely support those of Widyanto and Griffiths (2006), who stated that it is not necessarily the *medium* to which individuals become addicted, but to the actual behaviour of engaging in online activities and interactions (Kuss, Griffiths & Binder, 2013). Participants further made reference to their peers experiencing anxiety if their phone was not working, using a comparison between smoking and mobile phone use, as well as the withdrawal one may experience as a result of not being constantly connected. Associations with symptoms of substance-related addictions, such as those herein mentioned, are reported in the literature (Griffiths, 2005; Kuss et al., 2013).

That students expressed a desire to belong to their identified social group and find acceptance in their social community (Hogg & Abrams, 1999; Rosen, 2012; Sherman et al., 1999; Terry et al., 1999) is a prominent feature and outcome of this research. A secondary sub-theme titled “An addiction to fitting in” brings to light this interesting and complex component of socially normative behaviour and the desire to belong or fit in to a group (Reicher et al., 2010). This desire, or need, to belong and to feel a part of something is discussed by Gangadharbatla (2008) and Rosen (2012), as a need for individuals to feel loved or liked and to feel that they are socially accepted in their identified group. Rosen (2012) explains that individuals who think and act in ways that represent group norms and values, are driven to do so by their yearning to belong. Made evident by the student participants, CMC offers the platform for individuals to address this need (Gangadharbatla, 2008). This need is certainly not unique to the student population. The need to feel consistently and positively connected with others is conceptualized as a fundamental need of human beings and underpins various institutional cultures (Coyne et al., 2011; Greenwood et al., 2013). As such, valuable links can herein be made between SIT and CMC use among students, as well as, potentially, other social cohorts.

This need may further be conceptualised as the extent to which social inclusion occupies individuals’ time and thoughts (Greenwood et al., 2013). Findings from the student participants support this desire and felt need to belong both in terms of the student context and environment, but especially among their identified peer network (Coyne et al., 2011). Constant use of CMC by the student participants was substantiated with the argument that they needed to be included in all that was happening in their broader peer network. As such, students want to avoid being ‘left out’ (Rosen, 2012); for this purpose the participants

expressed how, for example, they establish groups on Whatsapp, so that they do not miss out on action or news within their multiple peer groups – be it their class peers, house mates, or old high school friends. Participants also referred to groups joined on Facebook that indicated allegiance and group membership with their university, and mentioned that information provided in the ‘about’ section on Facebook, and what an individual ‘liked’ or ‘followed’, could further illustrate group membership (Brown, 2013; Turkle, 2012). With this action being undertaken as a normative behaviour among the participants’ student peers, support is provided that this behaviour is large-scale and collective in nature, contributing to the knowledge of social influence in group membership (Postmes et al., 1999). In fact, according to SIT, membership to social groups and categories has an important influence on individuals’ self-concept (Reicher et al., 2010; Terry et al., 1999). Furthermore, self-enhancement can result when individuals evaluate and define themselves by means of a self-inclusive social category.

One final element that was revealed by the students in describing their frequent use of CMC explains that it is not purely driven by social or psychological determinants. In fact, there is one pivotal element of all these antecedents that enable or encourage students to engage in CMC use as often as they do: affordability (Skierkowski & Wood, 2012). Indeed, the cost to subscribe to all the various SNSs students belong to, or for the various applications and functions available on their mobile smart phones costs very little (Igarashi et al., 2008; Lu et al., 2012; Skierkowski & Wood, 2012). It seems highly likely that if students (or their parents) had to pay large sums of money for these facilities, they would not engage with them as often as they do. All of the participants indicated that their use of CMC is partially driven by economical factors. In addition to it being highly economical, it is simple and effective in sharing information of social and work-related matters between peers (Hansen et al., 2015).

6.3 Theme 2: The image you want to show the world

The desire for individuals to present positive images of themselves is not necessarily a novel concept; however, the dawn of CMC and SNSs have changed the dynamics of impression management substantially (Chou & Edge, 2012; Livingstone, 2008; Midgley, 2013; Rosen, 2012). It has, in fact, been acknowledged that there is indeed more attention given to, and a heightened focus on, visual impression management on various social media websites (Manago et al., 2014).

A central focus around image and impression management techniques, dynamics and observations or experiences was revealed by all of the student participants. A prevalent finding in this regard was that CMC – in the form of Instagram, Facebook, Twitter and LinkedIn especially – serve as ideal platforms for students to present images of themselves that can portray favourable impressions onto their peers (Chou & Edge, 2012; Midgley, 2013; Utz et al., 2012). This impression management is thus not necessarily an accurate self-representation but one that is driven by the felt ideals, notions and expectations that students ascribe to their social groups (Terry et al., 1999; Chou & Edge, 2012; Manago et al., 2008; Midgley, 2013; Rosen, 2012). Students expressed that who they present themselves to be on social media is “not exactly who you are” (Lydia) but is a created image, which they feel comfortable for the world to see. This representation shows a socially-acceptable self which will be viewed in a positive light (Terry et al., 1999; Turner, 1999). This central focus on self-presentation was even mentioned as having addictive qualities, which can be linked to that which is discussed above, and encompassing issues of social awareness (Kuss et al., 2013).

Livingstone and Brake (2010) suggest that “at the heart of the explosion in online communication is the desire to construct a valued representation of oneself which affirms and is affirmed by one’s peers” (p.76). Accordingly, young adult SNS users decide what information is provided on their profiles, which photographs they would like their peers to see, which specific attributes to highlight and which friends to display (Ahn, 2011; Liu, 2008; Manago et al., 2008). From a SIT perspective, it is herein evident how students might ascribe to a self-image that is approved by their peers, and tailor this image such that it is representative of group membership or social belonging (Reicher et al., 2010). Furthermore, in line with this notion, CMC and SNS users can emphasise or embellish characteristics of themselves that are socially desirable but not easily discernible in FTF interactions (Zhao et al., 2008). As such, a more appropriate term to group the impression management that students make use of on these CMC platforms is selective self-presentation (Zhao et al., 2008).

A prominent reference in various SIT research concerning image and impression management is the work and ideas of Erving Goffman (1959) (found in Manago et al., 2008; Rosen, 2012). Goffman’s work describes individuals as presenting images of themselves in order to gain acceptance by others (Jenkins, 2014). Goffman further suggested that the art of impression management lies in the portrayal of one or more specific identities and attempting

to influence how they are received by one's different peer groups (Jenkins, 2014). The link between Goffman's theories on impression management and CMC has been well recognized by various prominent researchers in the field (Whittaker & Gillespie, 2013). According to these theories, individuals' impression management may be likened to an actor's use of costumes and props, and their choice of stage and performance or character (Goffman, 1959; Rosen, 2012; Whittaker & Gillespie, 2013). As such, it becomes evident that in the same way an actor may select their costume, performance and stage, so too can an individual selectively display images and information pertaining to themselves, thus presenting the image they want to show the world. In this regard, it was expressed by the participants, that one is able to present different selves, according to the different social groups and contacts who would have viewing access to their profiles. For example, one participant, Simon, stated that, "as I mentioned LinkedIn, it dawned on me that these different platforms are opportunities to present different selves." This finding is supported in research by Whittaker and Gillespie (2013), who state that the variety of SNSs available enable individuals to promote different aspects in their self-presentation to different online communities. Thus, the way in which people use SNSs and how these SNSs are attracting different users reveals that individuals' identity is influenced by that social community and the people who participate in it (Whittaker & Gillespie, 2013).

According to SIT, the notion of self is context-sensitive and considers the self as a social identity (Ellemers et al., 1999). Thus it is implied that, in a social context, differentiation and social comparison occurs. As emphasised by Sarah, individuals selectively self-present so as "to suit whatever you want people to think of you." Self-presentation, therefore, cannot be understood in isolation but is often constrained or directed by the 'audience', and their defined ideals (Ellemers et al., 1999).

Engaging in social comparison is a natural outcome of such a heightened focus on self-image and may even be rooted in the reasons why students place such importance on their social network self-presentation (Feinstein et al., 2013; Midgley, 2013). On a typical SNS, individuals are given opportunities to observe photographs that their peers have posted, gain knowledge of their interactions with others, and to view what activities they have recently been engaged in (Manago et al., 2014). As such, one is able to gauge what the social norms are, perceive social expectations and pressures to abide by these normative behaviours and evaluate oneself relative to their peers (Manago et al., 2014). Student participants indicated that comparison is central to their use of CMC, with Facebook mentioned in

particular. To illustrate this, 10 million new photographs are uploaded onto Facebook every hour, providing individuals with the perfect medium to engage in social comparisons that may incorporate appearance, life-style, and friendship groups (Fardouly et al., 2015). According to Livingstone (2008), peer culture among young individuals, traditionally dominated by consumer culture, is likely to be over taken by the content creation of one's peers, which is made visibly evident on SNSs and CMC alike.

However, with such a vast and extensive discussion regarding individuals' selective self-presentation and impression management, the question of whether or not these images are believable and, indeed believed, is raised. In this regard, the student participants expressed that they intentionally engaged in selective self-displays to appear as having a better life and to evoke envy and a desire that others would wish they could live their life (Chou & Edge, 2012; Midgley, 2013). However, there was an acknowledgement of fundamental importance by all participants: that the image people create of themselves is too good to be true, and that people seem completely different in FTF interactions. As such, the student participants all expressed that they knew individuals painted a picture of their life on SNSs in favourable ways, and yet they continue to participate in this activity, knowing that it is not a realistic representation of one's life. Participants revealed that such a selective self-display is undertaken because it is felt to be a socially-normative behaviour (Kalpidou et al., 2011; Terry et al., 1999). Furthermore, it could even be perceived as an expectation in order to receive positive feedback and acceptance among their respective peer groups (Manago et al., 2014; Rosen, 2012), which may influence their self-worth (Manago et al., 2014). According to this notion of socionormative influences, avoidance of social exclusion and adherence to the normative expectations was in fact a driving force behind students' self-display behaviours. Students clearly expressed that there were felt societal expectations and perceptions of how things should be, and how they should be seen, and that something is wrong with you if you do not abide by them (Postmes et al., 1999; Terry et al., 1999).

6.4 Theme 3: People feel braver

Interpersonal communication has undergone a significant paradigm shift since the dawn and development of CMC (Brown, 2013; Rosen, 2012). A preference for the use of CMC in comparison to FTF interactions was expressed by the student participants, and fundamentally associated with an increase in felt confidence and social competence in interacting with others (Lu et al., 2012). University students are not exclusive in experiencing anxiety as an outcome or function of their desire to make a good impression upon others. However, as their use of CMC and SNSs, such as Facebook, is pervasive (Ellison et al., 2007), a substantial portion of their peer interactions and self-presentational behaviours occur via these mediums (Burke & Ruppel, 2014). It was highlighted by the participants that there was far less potential for awkward or embarrassing interaction outcomes via CMC, as the threats and pressures of FTF communication were not present (Skierkowski & Wood, 2012). Accordingly, participants explained that CMC affords them the time and opportunity to edit the content of their communication. In this regard, the potential for one to edit their image – from the wording of messages or posts on Facebook to the photographs one uses as their profile picture on Whatsapp – is substantial (Toma & Hancock, 2013).

An additional consideration of having time to edit and reflect what one says to another via CMC is that the individual is able to manage what is said, how it is said, and to a certain extent, how it is received. CMC, in this regard, affords individuals the opportunity to engage in interactions that are playful, asynchronous and noncommittal “in which the management of ‘face’ and negotiation of flirting, misinterpretation and innuendo is more controllable” (Livingstone & Brake, 2010, p.77). Individual’s reactions to that which is shared on CMC, coupled with the fact that there are no immediate consequences to what is said, were also mentioned by the student participants. As such, it was stated that people hide behind the screen of their mobile phone or computer in order to express opinions they would not choose to share in person (Lu et al., 2012). In this regard, it can be noted how such control or manipulation of what is relayed in a message can be used as a tool for impression management and self-presentation, or alternatively for confrontation. In comparison to the immediate nature of FTF interactions, the asynchronicity afforded by CMC allows individuals to consider strategic ways to present desirable self-images, editing their communication in order to achieve their goals for self-presentation (Burke & Ruppel, 2014).

Furthermore, individuals can monitor, adjust and portray their own online or CMC reactions. Individuals are therefore able to ensure that they do not respond too positively or too negatively to information that is disclosed to them, and as such utilize impression

management techniques (Midgley, 2013; Rosen, 2012). SIT (Terry et al., 1999) in this regard enables one to understand how an individual's preference for engaging with their peers via CMC might be used to enhance the feedback they receive from them (Skierkowski & Wood, 2012; Walsh et al., 2009). Due to increased control over expression and portrayal of oneself, people are thus able to align their own identity with those that are considered as socially acceptable (Rosen, 2012; Terry et al., 1999). In line with this, participants revealed that they have more self-confidence in portraying their desired image and gaining their peers approval online than they do offline (Lu et al., 2012). As such, the SIT provides a valuable link between preference for CMC and the establishment of socially acceptable impressions, which are more easily achieved due to increased control of the context and content of interactions.

Self-disclosure is an additional element linked to the notion of increased bravery when communicating with one's peers. Self-disclosure may be defined as any information communicated to another person about oneself, typically involving factual communication used in self-presentation (Chen & Marcus, 2012; Nadkarni & Hoffman, 2012). Furthermore, self-disclosure and self presentation have a tendency to highlight an individual's positive attributes for the purpose of self-enhancement, and are also important for relationship development (Chen & Marcus, 2012). In this regard student participants expressed that they were able to say things or talk about themselves online in a way that they would not want to, or be able to, offline (Nguyen et al., 2012; Trepte & Reinecke, 2013). With regards to male and female students interacting on CMC, students of both sexes stated that in interactions with the opposite sex, one was more forthcoming with personal information online. In fact, in person they not only were less revealing in their disclosure but could even come across as quite different to their online personas. Thus, the findings that emerged in this study were similar to other research that states that self-disclosure is greater in online communication (Chen & Marcus, 2012). Increased disclosure can largely be attributed to the felt sense of anonymity (Kuss et al., 2013), which was also mentioned by the student participants in this study.

Self-disclosure can additionally play a role in individual well-being. More specifically, researchers suggest that individuals' relationships improve when they disclose more personal information and in expressing thoughts and emotions (Ahn, 2011). Increased peer relationships can result in general psychological well-being and enhanced self-esteem (Ahn, 2011; Valkenburg & Peter, 2009a,b). As such an important benefit of CMC is herein addressed. However, students also expressed dissatisfaction with the fact that CMC was a

cue-limited means of communication. A cue-limited medium is one in which individuals are unable to convey social-cues which are non-verbal or paralinguistic, such as emotions, gestures, facial expressions, tone of voice, intonation or accents that are readily utilized in FTF interactions (Brown, 2013). Consequently there are many misunderstandings that result from misinterpretations and misplaced or misread animosity in online messages. Included in this was that the reader is not able to pick up the intended sarcasm or teasing style in which the message was written. Thus further suggesting that the fundamental tenets of interpersonal communication are changing.

6.5 Theme 4: A way of escaping

University students typically find themselves in a new environment, facing different social and cultural norms present on the university campus, and are characteristically at a unique phase of their life, experiencing social independence for the first time (Rabow & Duncan-Schill, 2001). Kuss et al. (2013) explain that the university setting can foster feelings of social intimidation and that social adjustment along with the development of social ties are imperative for students to succeed. In this regard, students encounter different social expectations and pressures to fit in, an important element of this is their social life and social identity (Rosen, 2012). As such students may be particularly sensitive to felt social expectations and may desire to behave and conduct themselves in ways that are deemed socially acceptable (Terry et al., 1999). The SIT therefore can facilitate in an enhanced understanding of the association between feelings of intimidation, social expectations and adjustment, and the role that CMC plays.

The establishment of close relationships in the student population is of great importance, yet they can often experience anxiety and find it difficult to interact in many FTF situations (Lu et al., 2012). This anxiety is linked to a fear of failing to communicate in ways deemed desirable and effective (Lu et al., 2012). In regard to these felt pressures and social expectations, student participants indicated that by using their mobile devices – be it messaging their friends or simply scanning Facebook – they were able to avoid interacting with others in ways which they found challenging and in which they might feel awkward.

Mobile phones are equipped with numerous functions, such as Internet browsers and digital media players, enabling one to do anything from watching YouTube videos to

browsing Instagram (Igarashi et al., 2008). In this regard one can conveniently separate oneself from the immediate environment by accessing, through technology, a situation which they prefer. The smartphone serves as a portal to their ideal world and negates the challenges of their surroundings, which the student participants indicated were typically of a social nature (Igarashi et al., 2008). In line with these findings, participants expressed that it was a way of escaping their present reality and steering clear of situations they did not feel comfortable in. Strong feelings of social isolation and alienation are often associated with the university setting (Kuss et al., 2013; Young, 2004). As such, use of the internet to appease these feelings may contribute to its allure (Kuss et al., 2013). In accordance with these findings, mobile phones and other CMC devices were referred to by participants as a pacifier or scapegoat for the anxiety one experiences, especially when interacting with unknown others in person. Viewed from the perspective of SIT (Terry et al., 1999), by engaging with a CMC device, one is able to appease feelings of social intimidation, because the threat of failing to interact with others in appropriate ways is minimised. An additional dimension to individual's reliance on CMC devices is thus provided, particularly in a context when one feels socially isolated or alone (Turkle, 2012).

Mobile phone use may offer students further facilitation in a variety of other psychological and developmental challenges. A dramatic increase in the use of mobile phones on university campuses has been widely noted and is now considered an element of fundamental importance in student life (Lin et al., 2011). In the transition to university, one is faced with numerous stressors, one of which is the lack of a strong and supportive social system – namely family and high school friends (Lou et al., 2012). Accordingly, the potential for university students to experience loneliness is high (Lou et al., 2012). In line with these findings, students expressed a very interesting concept that links loneliness to felt social expectations on campus; thus highlighting the link between SIT and understanding the use of CMC. In this regard was the notion that students' prevalent use of CMC was driven by an expectation or, in the words of a participant, “society creates this stigma that it's not okay to be alone” (Hannah). Thus not only are individuals engaging in this type of communication because of habit (Christakis et al., 2011; Rosen, 2012), desires for positive self-presentation (Ellison et al., 2007) or to have more control (Conti-Ramsden et al., 2010) but also because they feel dictated to by societal expectations. They feel that to be on one's own is not acceptable. In order to appease this socially accepted norm, participants expressed that if one is on their mobile phone, they do not *seem* to be alone. They are not alone because it is

evident that they must be (or are at least able to be) communicating with their peers via various modes of CMC.

As such, the mobile phone enables one to make obvious their ability to interact with and maintain a wide social network (Przybylski & Weinstein, 2012; Turkle, 2012). In other words, if one is occupied on their mobile phone, it acts as a prime (or symbol) that represents implicit associations with one's having, and engaging with a wider peer group (Przybylski & Weinstein, 2012; Srivastava, 2005). As such, it may be considered that the mobile phone offers one security and is also a means of comfort in situations where one's friends are not present. In line with this finding, participants indicated that their comfort was derived from, or could be illustrated by, the fact that "[you're] never completely alone anymore, there's always all your friends, or everyone you know, in your pocket" (Nicholas).

The above mentioned expectation differs to that in Shapiro and Margolin (2013) and Thomée (2012). Their research identified a social expectation for one to be constantly connected to their mobile phone, driven by the expectation to be available at all times via CMC. The present study's findings do not contradict this expectation, but add another dimension to why, when observing university students, they frequently appear to be on their phones (Skierkowski & Wood, 2012). These findings thus support the literature, which indicates a preference among students to communicate indirectly via CMC. As such, any obstacles which FTF situations may present can be avoided and any associated social pressures minimised (Skierkowski & Wood, 2012). Adherence to social expectations is herein clearly a driving factor in student's use of CMC as they strive to represent identities coherent with the group norm.

On the other hand however, research supports the notion that impaired social functioning may result from a lack of genuine FTF social interactions and an overreliance of CMC online relationships (Huang, 2010). Online 'friendships', without additional FTF contact, are frequently superficial and can lack the necessary feelings of commitment and affection (Huang, 2010; Valkenburg & Peter, 2007). In this regard there was an awareness from the students that, by spending so much time on their mobile devices, they were missing out on a lot of what was going on around them. If one is often preoccupied by the preferred CMC device, people are going to be less aware of the people and the activities that are in their present environment. More profoundly, participants expressed that they were often not actually aware of what was happening in 'real life' and that they in fact were "not really

doing life anymore” (Abie). Central to this concept was that students often walk around campus, from one class to another, on their mobile phones and are utterly absorbed in that activity (Pettigrew, 2009; Rosen, 2012). A further outcome of this is that students might also feel left out, or alone, if most people around them are on their phones. Consequently, it is becoming increasingly evident that CMC is replacing in-person, FTF communication with interactions occurring online (Huang, 2010). Regarding compliance with socially normative behaviour, the over-involvement with CMC devices in social settings highlights potential negative outcomes of dependency in its use (Igarashi et al., 2008).

In light of the above discussed results and in consideration of SIT (Reicher et al., 2010), further support is provided for the social motivation of CMC and mobile phone use. As such, individuals who make use of the positive perceptions and advantageous outcomes of CMC will be socially motivated to continue communicating with peers via this medium (Walsh et al., 2009). This indicates that established group norms can moderate and influence young adults CMC behaviour (Reicher et al., 2010; Skierkowski & Wood, 2012). When students comply with the socially approved behavioural norms, they often experience a boost to their sense of belonging, which is likely to enhance their self-esteem. When the pressure and obstacles of FTF communication are removed and the context and content of the communication can be controlled, self-esteem can be further enhanced (Skierkowski & Wood, 2012). Thus, CMC activities are likely to have a deciding impact on the formation of one’s social identity (Skierkowski & Wood, 2012). While this theme certainly has foundations in the existent literature, it offers a unique dynamic to understanding the popular use of CMC among the student population.

6.6 Theme 5: A big distraction

The advantages of CMC are both numerous and unambiguous, yet when used excessively it is associated with potentially harmful and concerning behaviours (Billeux, 2012). While the mobile phone is a convenient tool for communication, excessive use and over dependence are identified in many populations (Igarashi et al., 2008). According to Rosen (2012), the use of CMC devices are central in the majority of the activities one participates in that many struggle to ignore them while conversing with friends, dining at a restaurant, driving a car (Atchley & Warden, 2012) or walking from one class to another. As such these mobile devices are likely to divert one’s attention away from current activities or

interactions, to thoughts of people and events beyond their immediate context (Przybylski & Weinstein, 2012; Rosen, 2012; Srivastava, 2005). In this regard, the student participants' regular use of CMC in their daily lives was considered in the context of their academic activities and commitments. The drawbacks and disadvantages regarding academic outcomes were a primary highlight when participants related their use of mobile devices to the academic side of university life.

In line with previous discussions, the expectation for one to be constantly available to one's friends is well documented and may further be exacerbated by a fear of offending a friend or peer with a delayed response (Shapiro & Margolin, 2013; Turkle, 2012). On a similar note, students' feelings of anxiety if unable to check in with their CMC devices and SNS profiles is considered to be high (Rosen, 2012; Rosen et al., 2013). In an attempt to explain why CMC use during class was so rife, student participants expressed that it was the most discreet form of communicating with others or occupying one's time during a class. In this regard it is seen as a socially acceptable alternative if one is not focusing in class; it is also more discreet than interacting in person (Rosen, 2012; Rosen et al., 2013). This finding is further supported by the acknowledgement that students are extremely attentive to social expectations, often aligning their conduct and behaviour in ways that are deemed socially acceptable (Terry et al., 1999). Alignment of behaviour in this regard makes evident the association between SIT and use of CMC in the learning environment. Furthermore, mobile device use may be driven by a desire to avoid appearing socially isolated in the lecture hall and to avoid interacting with someone unknown in an adjacent seat. This additional element makes a connection between the fourth and fifth theme: there exists a desire to avoid appearing alone and interacting in-person with one's peers within the lecture environment. It is thus indicated by the participants that, in addition to the felt expectations for constant connection and desires to avoid challenging FTF interactions (Przybylski & Weinstein, 2012; Rosen, 2012; Skierkowski & Wood, 2012), it is considered both normal and acceptable to use CMC devices during class time (Rosen et al., 2013). These findings are in line with principles evident in the SIT (Terry et al., 1999).

With regard to the above-discussed constant exposure to social media and CMC (see Themes 1 to 4), it is necessary to discuss the influence that frequent mobile phone use and the high prevalence of task switching (or multi-tasking; Rosen, 2012; Rosen et al., 2013) has on academic performance. Some research indicates that CMC can positively influence students' academic achievements (see Rosen et al., 2013); there is the example of the benefits of social

support by means of CMC in times of stress or difficulty (Thoméé et al., 2011). Yet, in contrast, many state that the academic ramifications are severe (Johnson et al., 2007; Rosen et al., 2013; Walsh et al., 2013). As the title of the theme indicates, CMC was most often referred to by the student participants as a big distraction. As such, students often went to extreme lengths and had developed different methods to prevent this distraction. Such measures included giving their phone to a friend studying in a different room, turning it off, placing it in a desk drawer, or leaving it at home and studying in the library.

In trying to explain why it was such a distraction, students indicated that mobile devices provided greater entertainment and was a more appealing activity than having to sit in focused concentration. It is in fact suggested that the relationship between use of media among university students and poor academic results may be due to displacement in their activities (Walsh et al., 2013). In this regard it is surmised that regular engagement in media technology displaces important activities required for academic success. Such activities include focusing in class, doing the required readings, and completing homework and assignment tasks. Impulsivity and attention problems may also result, as the non-cerebral activities on CMC encourage passive behaviour and promote regular checking of devices (Rosen et al., 2013; Walsh et al., 2013), which is supported by the student participants' accounts of their CMC device use.

Students who task switch between academic activities and use of CMC devices have to divide their attention (Rosen, 2012). As such, one's attention is not fully committed to their present experiences, nor completely invested in the task at hand (Prsybylski & Weinstein, 2012). In a similar tone, students remarked how they struggled to focus on their work when their mobile phone was right by their side. Accordingly, students explained that they would routinely, and often unconsciously, pick up their phone every few minutes, allowing and indeed welcoming the distraction. Accordingly, although fully aware that nothing was learned or heard when using their phones, they struggled with the temptation and almost always succumbed to it.

According to Rosen et al. (2013), students have a fundamental desire to multitask (or task switch), and media technology and CMC devices enable just that. Their findings suggest that educational models should be developed to include the option of appropriate multitasking and the incorporation of CMC devices into the class room (Rosen et al., 2013). Student participants comments regarding this was that many of their classes had attempted

incorporating social media use; however, they felt that this merely aggravated the possibility of distraction. Participants explained that once one accesses a mobile device, the distractions therein increase (Walsh et al., 2013). As such, many participants described their online activity as something in which one can become absorbed or “get stuck in” (Sarah). It was thus revealed that mobile devices are often intentionally used as a tool for procrastination (Rosen et al., 2013).

Furthermore, students’ use of the Internet and different forms of CMC late into the night may result in fatigue and ultimately affect their academic outcomes (Cao et al., 2011; Lin et al., 2011). In line with this finding, students indicated that their use of CMC late at night affected their sleep, resulting in concentration difficulties and fatigue, with many reporting that they fall asleep during their lectures (Cao et al., 2011; Murdock, 2013; Thomée et al., 2011). However, it was also explained that classes were often so boring, the only way one managed to stay awake was either by playing games on their phones, watching YouTube videos, or engaging in some form of online communication (Rosen et al., 2013). As such it can be seen that CMC use has a variety of negative effects in the lecture environment, both directly and indirectly (Thomé et al., 2011).

In discussing these issues with the participants, they expressed an awareness that, while it might be inviting to occupy themselves and become acquainted with their online worlds, they were actually wasting valuable time. Not only did all participants express that the communication that happens online can be time consuming, but that it takes longer than if they were able to communicate in person or by making a phone call. This time-wasting was also linked with the fact that they often lost track of time when they were online, perhaps only intending to do something quickly, such as watching a YouTube video or replying to someone on Facebook and then going on to spend in excess of an hour on the website (Rosen, 2012). In order to prevent this from happening, participants stated that one has to consciously endeavour not to be distracted by their mobile devices. By setting boundaries for themselves, and through trial and error, the participants managed to develop techniques to reduce CMC related distractions.

6.7 Summary

A discussion of the research findings, in relation to the existent literature and SIT (Sherman et al., 1999; Terry et al., 1999) were provided in this chapter. The discussion was divided into five themes, beginning with a focus of students having constant connection to their mobile devices. Thereafter the concepts of impression management and selective self-display were explored. The use of CMC as a tool to firstly, boost one's confidence and secondly, to avoid the challenges of FTF communication were then reviewed. Lastly, CMC was considered in the context of the academic environment at university. In the following chapter, recommendations for future research, the limitations and concluding remarks of the present study are discussed.

Chapter 7: Conclusion

This final chapter considers the limitations of the study and recommendations for how future research can expand the field of study. Lastly a conclusion on the present findings will be presented, focusing on what the study has contributed to the existing body of knowledge.

7.1 Limitations

Several limitations have been identified in the present study. The first among these is an assumption of homogeneity among the sampled population. Many of the studies conducted on student or adolescent use of CMC that are reviewed in this thesis assume that all users in these populations are homogenous; this study followed suit. However, the limited available research of CMC use in South Africa indicates that usage patterns are socially driven, with class (or socio-economic status) and race being recognized as variables of fundamental importance (Young & Strelitz, 2014). In order to overcome this limitation, a better strategy might have been to identify a quotient for the number of, for example, male and female students, as well as cultural and racial identities that would have been representative of the broader student population. This quotient could have been used when sampling and selecting students participants.

Secondly, and in line with the first limitation, the participant group does not represent the broader population of students at Stellenbosch University. Efforts were undertaken to achieve variety regarding the faculty under which the students studied, their year of study, postgraduate and undergraduate status, selected subjects and majors, and demographic variables such as age, gender, language and racial profile. Nevertheless, the participant group was not an accurate reflection of the diversity of students regarding the abovementioned variables at Stellenbosch University. Fortunately however, the sample did represent a certain degree of variation. A means of overcoming this limitation could be to employ sampling methods that are more specific in this regard, such as utilisation of a quotient in the sampling methodology.

Various methods were utilised to validate the trustworthiness of this study. As such, credibility efforts, a means of ensuring that interpretation of the data is a true representation of the participants' lived experiences were implemented. More specifically, each student was

emailed the transcript and any tentative interpretations of their interview and then each was requested to validate it. However, a third limitation of the study is that, although member checking (or participant validation) as a means of ensuring credibility was employed, the level of response from the participants was not thorough in terms of verifying the resultant themes. Thus, although emails were sent to each student, the students responses were often lack lustre, generally indicating that they were not interested in validating the transcript and interpretations, but were happy for them to be used without any corrections. In order to avoid a lack of thorough verification of resultant findings, a focus group with the participants could have been organized in order to get direct and immediate feedback. Due to the researcher's time constraints and the participants' various university responsibilities and expectations, it was not possible to implement this technique. To overcome geographic and time constraints, use of technological affordances, such as arranging Skype interviews, may prove effective. Use of such methods would be ideal for future research.

7.2 Recommendations for future research

The research endeavours undertaken in this research project have provided insight and understanding into the lives of university students in relation to their use of CMC; however, there is a lack of larger research efforts in the South African context. As such, considering the vast use of CMC and its identified importance in the lives of students, there is value in increasing the scale of this research. Accordingly, future research could focus on a variety of participant groups from various universities in order to allow for results to be more encompassing. Additionally, large scale quantitative research efforts would supplement and bolster any qualitative findings; research of this type is limited in South Africa and it is thus important for an accurate picture of the regularity and popularity of CMC use to be established.

The university student population, however, is not the only population that necessitates exploration of CMC in order to understand the dynamics of its use and its role in daily life. As such, future research endeavours could include various age-group populations, especially those which research has not yet explored, such as middle and late-adulthood.

Furthermore, the adaptation of a study conducted by Rabow and Duncan-Schill (2001) which investigated university students drinking experiences could potentially be

applied to CMC research. Making use of diary entries and logs of time and duration of use after periods or episodes of CMC, as shown in the Rabow and Duncan-Schill examination, would prove noteworthy. Such data collection methods would provide additional insight into individuals lived experiences, and thoughts or feelings shortly after the CMC has taken place.

7.3 Conclusion

The lived experiences of university students in relation to their use (and desire to use) CMC was central to this study, which sought to explore the dynamics of its use and develop an understanding of why it is often seen to occur frequently. The university environment is recognised as one in which pressure to conform is significant and where excessive use of CMC is readily observed. The existent literature that has investigated CMC use among emerging adolescents, although vast, lacks the depth and insight of lived experiences among university students that this study sought to understand better, typically limiting its focus to particular components of CMC and utilisation of quantitative methodology.

As a qualitative investigation of a sample of students at Stellenbosch University, this study highlighted the fundamental role that social identity plays in influencing individuals' behaviour surrounding CMC and revealed that students experience a number of felt social pressures with regard to its use. The emergent findings revealed that CMC is considered a central element in the daily life of a student. It is typically accessed on a mobile (or smart) phone, and could serve to distract students from applying themselves academically. Distraction from self-motivated study and during academic instruction were readily identified as a particular challenge in students managing their use of CMC. In this regard, it was revealed the use of CMC and associated devices happens on a continual basis in a habitual, often unconscious, manner and can therefore be understood as a tendency which has become reflexive, or 'second nature'. In line with this finding, use of the various CMC platforms (especially Facebook, email, Twitter, Instagram, Pinterest and Whatsapp) were completely and continuously integrated throughout the day. Thus a study such as the present one, which considered CMC in its totality, highlights the multitude and extent of CMC usage and the benefit of *not* focusing on specific elements of CMC in trying to understand this phenomenon better.

Social motivation, conceding to normative behaviours and the desire for social acceptance, was a driving factor in CMC use. This social motivation included the ability for one to present desired self-images, increased confidence in communicating over CMC devices, and a means to avoid the challenges associated with undesired FTF interactions. The SIT (Reicher, Spears & Haslam, 2010) was used to contextualize the emergent themes, which were reviewed in relation to the existing literature on use of CMC among the emerging adult population. The themes were found to be well represented in the existing literature. As such it can be understood that the experiences of students in South Africa are largely not that different to parts of the world where CMC research is prolific, such as in the United States. However, contextualization with the SIT provided a unique paradigm and dimension worthy of consideration in understanding the role of CMC in one's life.

Findings revealed that the felt social pressures to engage in regular use of CMC were dominant in the student culture, with frequent use being considered an expected behavioural norm. Driven by their desire to belong, students embraced frequent use of CMC as a means of appeasing norms and maintaining the potential for constant connection with one's peers. By adapting their behaviour they enabled the development of habitual norms and a preference for using CMC to communicate with one's peers. As such, the influence of socionormative factors in individuals' behavioural decision-making is brought to light. It is thus indicated that students are finely tuned and sensitive to felt expectations and indicate a readiness to adapt their behaviour and yield to perceptions of normative behaviours in order to accomplish a sense of belonging and identifying the self as part of the group.

Students indicated that social facilitation was an outcome from engaging in regular use of CMC and, as such, also promoted their desire and preference for its use. Central to this was the notion that students tend to exploit the technological affordances of CMC in order to construct messages that manage and better portray desired impressions of themselves, and for the facilitation of desired relationships, all of which are not as easily regulated in FTF settings.

It is thus revealed that the socio-cultural realities which a student experiences, can regulate their individual behaviours. From this perspective, students are united through a joint sense of belonging and their actions can largely be driven by the socio-cultural expectations and meanings associated with the group with whom they identify. By virtue of this study illustrating substantive support for the influential role social identity plays in CMC usage and

behaviours among university students, these results underpin the importance of the desire for adherence to perceived normative expectations in the student culture. As such, the results point to the complexity of CMC use among the student population, as well as the importance of group norms and identity.

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List of Appendices

The following documents have been attached, and are included in support of the present research study.

Appendix A: Ethical approval

Appendix B: Institutional permission

Appendix C: Informed consent form

Appendix D: Interview schedule

Appendix E: Table 5.6, Theme overview

Appendix F: Participant reflections and profiles

Appendix G: Example of Transcript and Analysis

Appendix H: Proof of external editing

Appendix I: Turnitin report

Appendix A



UNIVERSITEIT-SELLENBOSCH-UNIVERSITY
jou kennisvenoot - your knowledge partner

Approval Notice Stipulated documents/requirements

23-Jul-2014
Maile, Andrew A

Proposal #: HS1067/2014

Title: No we don't have WiFi. Talk to each other: Understanding the dynamics of computer-mediated communication and its impact on well-being

Dear Mr Andrew Maile,

Your **Stipulated documents/requirements** received on 22-Jul-2014, was reviewed by members of the **Research Ethics Committee: Human Research (Humanities)** via Expedited review procedures on 23-Jul-2014 and was approved.

Sincerely,

Clarissa GRAHAM
REC Coordinator
Research Ethics Committee: Human Research (Humanities)

Appendix B



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvenoot • your knowledge partner

25 March 2013

Mr Andrew Maile
Department of Psychology
Stellenbosch University

Dear Mr Maile

Concerning research project: *No we don't have WiFi. Talk to each other: Understanding the dynamics of Computer-Mediated Communication and its impact on well-being*

The researcher has institutional permission to proceed with this project as stipulated in the research protocol. This permission is granted on the following conditions:

- the researcher must obtain ethical clearance from the SU Research Ethics Committee,
- the researcher must obtain the participants' full informed consent,
- participation is voluntary,
- persons who choose not to participate may not be penalized as a result of non-participation,
- participants may withdraw their participation at any time, and without consequence,
- data must be collected in a way that ensures the anonymity of all participants,
- individuals may not be identified in the results of the study,
- data that is collected may only be used for the purpose of this study,
- the privacy of individuals must be respected and protected.

Best wishes,

Jan Botha
Senior Director: Institutional Research and Planning



Afdeling Institusionele Navorsing en Beplanning • Institutional Research and Planning Division
Privaatsak/Private Bag X1 • Stellenbosch • 7602 • Suid-Afrika/South Africa
Tel. +27 21 808 3967 • Faks/Fax +27 21 808 4533

Appendix C



UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvennoot • your knowledge partner

STELLENBOSCH UNIVERSITY CONSENT TO PARTICIPATE IN RESEARCH

No we don't have WiFi. Talk to each other: Understanding the dynamics of Computer-Mediated Communication and its impact on well-being.

You are asked to participate in a research study conducted by Andrew Maile, a masters student from the psychology department at Stellenbosch University. The results will contribute to a masters research project, which forms part of the masters degree. You were selected as a possible participant in this study because you met the following inclusion criteria: you are between the ages of 18 and 24, are a registered student at Stellenbosch University, and you actively and regularly make use of at least two types of computer-mediated communication (CMC).

1. PURPOSE OF THE STUDY

To gain insight on, and understanding of, the ever prevalent use of computer-mediated communication (CMC) in the daily lives of university students, how it has revolutionized their interpersonal and communication behaviours, and the potential impact it may have on their well-being.

2. PROCEDURES

If you volunteer to participate in this study, you will be asked to do participate in an interview which should last roughly an hour in length. You will be asked questions from a semi-structured interview schedule, but essentially the main idea is for you to share your thoughts and experiences in as much detail as possible.

The interviews will take place in a private conference room in the J.S. Gerike library or the Carnegie Research Commons. The interviews will be recorded and transcribed for analysis; pseudonyms will be used to ensure your anonymity and no record identifying your biographical information will be kept. You will be emailed a transcribed copy of your interview, which you may review and make amendments to as you see necessary.

3. POTENTIAL RISKS AND DISCOMFORTS

The foreseeable risk that you may experience discomfort or emotional distress is relatively low, as the nature of the topic is a non-sensitive one. However, due to the fact that one cannot predict how a participant will respond during the interview, the research has been categorized as medium risk. If issues of concern due to distress of personal disclosure from the interview occur, you are advised to visit the Centre for Student Counselling and Development. The Centre for Student Counselling and Development is located at 49 Victoria Street and can be contacted on 021 - 808 4994.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

As a participant you are likely to benefit from the experience of the interview and from exploring your lived experiences; however, these benefits are subjectively determined. Benefit to the field of psychology and society in general can be gained if the findings of the research are published in an academic, peer-reviewed journal, by providing insight into the ever prevalent use of CMC, and by developing a new understanding of interpersonal behavior and communication.

5. PAYMENT FOR PARTICIPATION

You will not receive any payment for your voluntary participation.

6. CONFIDENTIALITY

Any information that is obtained from this study will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of assigning a pseudonym to each participant, any identifiable information will remain anonymous, and no record of identifying biographical information will be kept.

Only I, the researcher, and my supervisor, Dr Chrisma Pretorius, will have access to the recorded and transcribed interview data. Tape-recorded interviews, transcriptions and analysed data will be stored **in a secure cabinet in Dr Chrisma Pretorius' office, who will appropriately discard all data after completion of the study.**

If in the event that the results are published, the pseudonyms used will remain the same, and no identifying biographical information will be evident whatsoever.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any **questions you don't want to answer and still remain in the study.** The investigator may withdraw you from this research if circumstances arise which warrant doing so.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact:

Researcher: Andrew Maile – Ph: 021-794 2168, email: 15370607@sun.ac.za

Supervisor: Dr Chrisma Pretorius – Office: 021-808 3453, email: chrismapretorius@sun.ac.za

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE
--

The information above was described to [*me/the subject/the participant*] by Andrew Maile in English and [*I am/the subject is/the participant is*] in command of this language or it was satisfactorily translated to [*me/him/her*]. [*I/the participant/the subject*] was given the opportunity to ask questions and these questions were answered to [*my/his/her*] satisfaction.

[I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study.] I have been given a copy of this form.

Name of Subject/Participant

Name of Legal Representative (if applicable)

Signature of Subject/Participant or Legal Representative

Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [*name of the subject/participant*] and/or [his/her] representative _____ [*name of the representative*]. [He/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in [*Afrikaans/*English/*Xhosa/*Other*] and [*no translator was used/this conversation was translated into _____ by _____*].

Signature of Investigator

Date

Appendix D

NO WE DON'T HAVE WIFI. TALK TO EACH OTHER: UNDERSTANDING THE DYNAMICS OF COMPUTER-MEDIATED COMMUNICATION AND IT'S IMPACT ON WELL-BEING

INTERVIEW SCHEDULE

Ensure that the participant fully understands the aims of the interview, what the intended hope for the research outcomes is, and what is expected of them.

Ok, so let's just start at the very beginning. Could you talk to me about your daily habits of CMC use (incl. Facebook, Twitters, Text messages, Whatsapp, etc.; Smartphone, Tablet, Laptop, etc.) and how it is involved in your daily life and context of a student

Can you describe how your use might be compared to those of your friends/ peers?

Would you consider your use of CMC as "normal" use?

Can you tell me about your experiences – whatever really comes to mind – with using social media?

Which is your preferred device to communicate with friends? And could you try and explain why you like it so much?

Now, let's consider the scenario – maybe this has happened to you before – that the CMC device you use the most and which you value is:

Not on you, has been left at home

Your battery has died unexpectedly and there is no option to charge it

You cannot connect to the WiFi or just don't have signal

So, basically everywhere I look, I see people actively engaging on and making use of CMC devices – it's very much all around us. What do you think about this?

Could you discuss what you think the benefits are?

Do you think there are any negative outcomes or adverse consequences? Could you describe these?

- A well respected researcher in this field stated that “students are particularly obsessed with keeping constant tabs on the two most important connection vehicles in their lives – text messaging and Facebook”. What are your thoughts regarding this statement?

Can you discuss how you think this might be true, or perhaps incorrect?

One element of Facebook is the publicising of interpersonal interactions...what you communicate with friends can therefore be observed by others in a much broader network of people.

Do you have any thoughts as to why people might desire this, or enjoy this feature of something like Facebook?

What do you think might be the benefit of this?

And similarly, what do you think the appeal is for one to broadcast their thoughts and other personal information?

Some research suggests that people tend to inflate themselves, their experiences and activities, and to over express their thoughts and opinions.

What are your thoughts on this?

Pertinent topics that are common to research in this area are those of IMPRESSION MANAGEMENT and IDENTITY DEVELOPMENT.

What are your thoughts in this regard? Have these ever come to mind when you think about social media and CMC in general?

I recently saw an entertaining and interesting picture of an emergency sign on a staircase: This picture stated, “In case of fire, exit building before tweeting about it”.

What are your thoughts regarding this statement?

Do you think that sometimes people behave in ways similar to this? Could you try and explain how or why if this is the case?

Have you ever thought about why people express themselves and update their status on Facebook, Twitter, Whatsapp, etc., essentially notifying the 'wider world' about their experiences or thoughts?

What does the status update mean to you and what are your thoughts about it?

Do you think that people feel that they need to share?

- What are your experiences in this regard – either personally or in response to others updates?

How do you feel after using Facebook?

What normally motivates you to use Facebook?

Can you try and explain what it is you like about Facebook, and if there are ever times when you don't like Facebook, and why that is?

Do you ever find yourself losing track of time on something like Facebook, YouTube, Instagram, email or Pinterest?

How do you feel during that process? And how do you feel afterwards?

Now we are going to look at the university campus and your studies.

- Can you think of any ways in which Social Media and CMC has been helpful in
 - coming to university;
 - adjusting to campus life;
 - establishing a peer and social network?

- Sometimes CMC is referred to as a "social glue", what are your thoughts about this? Have you ever felt that this is the case?

If participants' dialogue dwindles ask about:

- Is there anything about the environment that supports students excess use of CMC
- Do you ever find yourself tempted to use it when perhaps engaged in conversation with others, or when in a lecture?
- Have you been able to use it to your advantage in the building of new friendships and social capital/ networks as such and essentially establishing 'yourself' as a part of the university environment and student culture
- Has it facilitated more than just establishing friendships? Has it also facilitated maintaining relationships through the social and sharing nature of CMC?
- Do you think CMC acts as a 'social glue' and (Facebook in particular) helps students adjust to university life?
- Do you think that the use of CMC is quite prevalent in the student culture at Stellenbosch, would you perceive it to be different elsewhere?
- What would you identify as your first choice of contacting roommates or friends from class or campus, and why do you think that is your preferred choice?

What is your response to the following statement?

High prevalence of CMC in our daily activities is linked to greater stress, makes us more busy and lose track of what we want to do; and impacts our well being

If participants' dialogue dwindles ask about:

- Do you think that your well-being is impacted by periods when you excessively use CMC?
- Have you ever experienced a lack of sleep due to CMC over-use?
- Are you aware of the high prevalence of motor vehicle accidents due to compulsively checking and replying to messages via CMC?
- Can you reflect on any personal experiences?
- Have you ever observed how individuals who obsessively interact via CMC might affect their well-being?
- Can you think of ways in which Facebook and other elements of CMC are increasingly being incorporated as an integral part of our daily activities?

Appendix E:

Table 5.6

Overview of the themes

Primary Theme	Primary Sub-theme	Secondary Sub-theme
Theme 1		
Always on my phone	Your whole life is on your phone	
	It does become a habit/ you sort of just get addicted	<ul style="list-style-type: none"> • An addiction to fitting in • The go to thing/ whenever I have free time • Expected to reply immediately • You feel left behind if you not connected the whole time
	It's cheap and simple	
	Theme 2	
The image you want to show the world	It's very much a comparison	<ul style="list-style-type: none"> • You try to have a better life • So people can feel envy/ you want them to want to be you • When you meet them in person they're completely different • Too good to be true
	You feel like you've got to	
	Just letting the world know	<ul style="list-style-type: none"> • Living the moment • Keeping tabs
	You looking for that attention	<ul style="list-style-type: none"> • Everyone wants to be heard
Theme 3		
People feel braver	When people are on Facebook they feel more anonymous	<ul style="list-style-type: none"> • People are way more comfortable on their phone

	They hide behind this screen	
	There are misunderstandings	
Theme 4		
A way of escaping	It's a lot more difficult to talk to people in person	
	Society creates this stigma that it's not okay to be alone	<ul style="list-style-type: none"> • Everyone in your pocket
	You're not really doing life anymore	
Theme 5		
A big distraction	I go on my phone in lectures a lot	<ul style="list-style-type: none"> • If you are a bit bored/ just to keep yourself entertained • I just think it's very rude • I end up falling asleep in my lectures
	It's so easy to get stuck in there	
	You just waste time	
	Social media is what I procrastinate with	<ul style="list-style-type: none"> • It's like an OCD thing
	You have to set boundaries for yourself	

Appendix F

Editing and proof-reading record

Andrew Maile: University of Stellenbosch, 2015

This is to certify that the abovementioned candidate has had his Master of Psychology thesis edited and proof-read by a third party, to ensure clarity, cogency and cohesion.

Please contact Janice Cameron should you have enquiries about the process.

91 Fairview Avenue
Woodstock, Cape Town
0799 377 548



Janice Cameron

ORIGINAL

Appendix G

Example of Transcript and Analysis

Transcriptions: Participant 1, Lydia (Mia)

Date: 24 July 2014

<p><i>Important University emails</i></p> <p><i>has someone tried to communicate with me - what have I missed.</i></p> <p><i>Wake up with it</i></p> <p><i>(alarm)</i></p> <p><i>First thing I do is go on Whatsapp</i></p> <p><i>Phone on me throughout the day.</i></p> <p><i>There is an expectation to always have your phone on you + parents complaint</i></p> <p><i>I am always on my phone</i></p> <p><i>Boring classes result in students resorting to using their phones</i></p> <p><i>WhatsApp is used frequently with me every now and then except when sleeping</i></p> <p><i>Sad to realise that are is on their phones often.</i></p> <p><i>Prefer not to use phone when in conversation with others - gets irritated when others do.</i></p> <p><i>other people are more than me; that's all they do the whole time.</i></p> <p><i>If you use your phone in conversation you're not giving them your full attention.</i></p> <p><i>- they feel less valued</i></p>	<p>A: Ok, so, basically let's just start right at the beginning. If you could just tell me about your daily habits of CMC use, and how it is involved in your daily life in the context of being a student.</p> <p>L: Ok, um, well obviously it's very important because you get university emails every single day, basically and you have to see, oh no we don't have lectures in this hall, we moving to that hall. Obviously if you don't use it you not going to be at the right place. Um, I wake up with my cellphone, um I have my alarm on and the <u>first thing I do</u> in the morning I go on Whatsapp so...did someone say hi to me or whatever, and my Facebook doesn't always work, but sometimes I do go on Facebook to see what's going on there or whatever. Um, I have my phone on me every single time of day and my Mom always gets so crappy about it "Lydia, why don't you ever answer your phone you better have your phone with you". So, I make a point of always having it with me every single day of my life in case she calls. Its scary but, its scary if like you get 3 missed calls from your mom, haha, it's worse than that! Really! Um, but ya my laptop I don't use so much, as I probably should, I think, Um...and I probably check into the Narga...Bsc students have Narga, um there maybe once or twice a week just to print or whatever, but that's more academic, it doesn't really have anything to do with relationships or, communication. <u>But I am always on my phone</u> - in class when it gets boring I Whatsapp, um, a lot! HAhahahahaha, and you always YouTube your friend, like "hey, look at this" passing him the phone and then they on the phone, and they've got a blackberry, and this one person's got a Samsung. <u>So it's literally with me every single time of day except while I sleep...so...it's quite sad actually, if you think about it.</u> Hahaha.</p> <p>A: It's not sad, as you say...</p> <p>L: Jees...</p> <p>A: That's why I am doing this research so...Um, if you look at your use of CMC's, do you think that's how generally everyone uses it? How would you compare it to your peers or your friends?</p> <p>L: Um I think mine is a bit less than...I wouldn't say actually my friends, but I would say my peers. My peers are, because um...a point is last night I was at uh, I was at Tollies, it's so common, but I was there... anyway...</p> <p>A: No, Tollies is great, hahaha...</p> <p>L: It's okay, it's okay...but anyway we were there, it was so busy, but um, these girls were standing together, it was like four [of them] or something and <u>they were all on their phones</u>, and it's like, why? <u>What's the point of going out if you just stay and talk with your friends [on the phone]</u> anyway. So that was a bit sad to see, so when I am in a conversation I wouldn't have my phone with me, um. But some people do do it and it irritates me. But I think mine is a bit less, I am not on Facebook the whole time, I don't really post on Facebook...I don't have snapchat for instance, I don't have Twitter...So I'm not that connected as some people would have like...everything and that's all they do the whole time. So I think I am a bit less than average. So...</p> <p>A: So, in terms of you keeping your phone away during a conversation, do you do that out of respect?</p> <p>L: Yes, I do. It's just, I feel um, you're not giving your total attention to a person and they feel, ag...I can't really find the words...they feel <i>minde waardige</i>? I'm sorry, I am bilingual but I can't remember the word now...</p>	<p><i>WAKE UP WITH IT</i></p> <p><i>ALWAYS HAVE IT WITH ME</i></p> <p><i>ALWAYS ON MY PHONE</i></p> <p><i>OTHERING</i></p>
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Appendix H

Participant profiles and reflections

A description of each participant interviewed in the present study will be provided below. The names used in these descriptions are pseudonyms that were assigned to each participant in order to ensure that confidentiality was maintained throughout the research process. Each description will include a summary of each participant, along with a personal reflection by the researcher on the experience had during each interview. It is important to note that each descriptive profile regards the state of the participant at the time of interviewing, and that as this thesis has been undertaken over a two year period, certain characteristics or variables may well have changed, such as year of study, graduating and moving onto postgraduate study or entering the workforce.

Lydia. Lydia is a first year BSc. student at Stellenbosch University, she is 19 years old and came to university straight after completing high school. Her primary motivation for studying a BSc. is to gain entrance into medical school. In this regard we were immediately able to establish common ground as her present university related circumstances were very similar to my own; for I too had initially studied a BSc. with the hope of gaining admission to study medicine. She has one younger sibling, whom she observes as being particularly obsessed with CMC, and to whom she referred several times in the interview. She explained her own use of CMC as something which is continuous, and which she thoroughly enjoys because of the entertainment it provides, its affordability, ease of use, and social facilitation.

My reflections of this interview are nothing but positive. As a friendly and warm individual, Lydia made it very easy to build a good rapport, and made the interviewing process exciting and encouraging. However, she often found it difficult to find the right English words, due to her being bilingual. I was not nervous at all for this interview, and it came off as a positive experience. Much of Lydia's experiences and reflections regarding CMC use were complex, and something which she found both difficult and easy to explain. It seemed that she had so much to reflect on, and so much which she wanted to mention, that she really enjoyed this opportunity to talk about her experiences, perceptions and struggles.

As it was my first interview, I came to realise that the room I had selected to conduct the interviews in worked very well, and was a comfortable and amenable venue for an interview of this type to take place. I was very pleased with the interview throughout the process, and really appreciate that Lydia was so open and honest, revealing personal

information, and relating her experiences to her childhood upbringing and her current struggles with CMC.

Briony. Briony is a first year student, studying a general humanities degree for the present time. She is an only child and comes from a very close-knit family; she has struggled in adjusting to the university environment and does not recognise peer relationships as being important to her, or something she is concerned with. Although I struggled to necessarily relate to Briony, and did not always fully grasp her social context – which was not dominated by her peers, but by her family and her parent’s friends – I was able to build a positive rapport. This was accomplished by putting any differences aside and maintaining a focussed desire on understanding her experience, and hearing what her perceptions, concerns and observations were. However I did find it difficult when her answers were very non-descript, in this regard I struggled in getting her to speak openly and at length of her experiences. I found it interesting that, although she maintained she was not concerned about her peers perceptions of her, she mentioned in particular her struggle with the “obsessive-compulsive” element of CMC and her mobile phone. Furthermore, it was alluded to during her interview that Briony had not really adjusted to the university environment, and had not integrated herself among her new group of peers. Fortunately, however, her family home was very close by, so she did not have to rely on her peers relations as her only source of social support. An additional difficulty with this interview was that Briony had a relatively outdated mobile phone, and as such could not necessarily have access to as many of the potentially distracting, time consuming, and peer focussed CMC platforms that she might be interested in using. In addition to this it came across that Briony was possibly not of the same economic status which is typically found at Stellenbosch – one that is normally fairly high – which might have been why her experience was somewhat different to what I had anticipated.

However, as I have indicated that this was not the easiest interview for me, it is interesting to note that during the transcription and analysis phase of this interview, there was so much value and depth to Briony’s account that I had not anticipated, and received some very exciting and powerful statements and reflections of her experiences. I had a very similar experience to this one during my honours, in which I later realised that the interview had so much more value than I originally anticipated.

Hannah. A bold, confident and well spoken young lady, Hannah is a first year student studying Speech, Language and Listening therapy, a Health Sciences degree in which two years are spent on main campus and two years on Tygerberg campus. She comes from East London in the Eastern Cape, and lives in a University female only residence. I was at once comfortable and at ease with Hannah, and found this interview to be a particularly exciting. Hannah needed very little probing, and was comfortable in sharing in depth her experiences, and had very profound statements regarding her perspectives of CMC use. She relayed much of her own experiences, and daily use of CMC in great detail and depth, providing valuable insight. Rapport was easily established, and the tone of the interview was very positive. However, Hannah's interest in participating in this study was due to an experience in high school, in which she was the victim of cyber-bullying, and she felt she wanted to share this experience. Interestingly though, this ultimately formed very little of the interview. Fortunately she seems to have dealt very well with that experience, and it no longer carries any weight or sadness for her; however, if this had not been the case I might well have found myself in a challenging situation. As an intelligent and well spoken person, Hannah's insights and experiences were excellently worded, and will likely be very valuable quotations in the results section of this thesis. Although this interview went on for over 1 and a half hours, I so enjoyed it that I would have been happy to continue for another hour. Hannah was very generous with her answers, and the interview process was very pleasant.

In addition, Hannah was not ashamed or embarrassed to acknowledge the central role that CMC played in her life, and openly expressed how she used it throughout the day, and had established routines to not let it occupy all her time. Furthermore she also offered unknown insight into her personal blog, and how that benefitted her and what elements she liked about it.

Katharine. Once again, this interview was a positive experience, and I am very satisfied with the outcome. Katharine is a very friendly young woman, and is a first year student studying a BA law degree. She is in a female only university residence, and is the youngest of three children. Her interest in partaking in this study was because her father spends a lot of time away working internationally, and she is very reliant on CMC to maintain contact with him, and indeed very reliant and dependent on it. Furthermore, she maintains close connections with her mother, who is based at home in Pretoria, and her two

siblings; interacting with them continuously throughout the day on Whatsapp in particular. As a law student she applied a degree of analytical questioning to some of the open ended questions I asked her, which tended to veer away from the intended direction of the questions; however, I appreciate that she took time and thought in answering the questions. She related much of her CMC use to her adjustment to the university environment, and expressed significant frustration in people not answering her immediately, especially on email, but also indicated that she was appalled with her fellow students lack of etiquette and manners when it came to the use of CMC in social settings.

A particular struggle I had with this interview was Katharine's being a first language Afrikaans speaker; and although she was fluent in English, many of her initial thoughts and responses came to her in Afrikaans, and in her self-translation process lost track of her thoughts and much of what she wanted to say, which might have been very valuable in the study. What was also particularly interesting was that Hannah was a very attractive young lady, yet she expressed that she did not feel her image was as attractive as the profiles of her peers of Facebook and Instagram.

Katie. Rapport and comfort in each other's presence was immediately established with Katie. She is a 19 year old, first year student, reading English and Psychology; having come straight to university after completion of her high school education. I found out that we live in the same suburb in Cape Town, and thus familiarity was immediately established. Katie applied a lot of thought and consideration to her answers, and powerfully related her struggle with the presence of social expectations and norms in how and when she should use CMC. She offered a very honest and genuine account of her experiences with CMC personally, and within her peer group. Because of this openness, I felt that I was so easily able to relate to her, and this really facilitated the interview experience. Furthermore she expressed gratitude for this study being conducted, and for the opportunity to reflect on her experiences, something she had never done before, but that she had given a lot of thought and consideration. She, like Lydia, was the eldest of two daughters, and also indicated how she perceived her younger siblings use of CMC to be far worse than her own, and worthy of real concern. This was very interesting to hear, especially in comparing her own experience as a student to her perceptions of her sister, a high school scholar. A powerful revelation for Katie was her struggle with knowing when enough was enough: especially watching series or

YouTube videos late into the night, and then her struggle to pay attention and stay awake during classes the following day. Interestingly she also readily identified the felt social pressures to always be on a mobile phone, and provided excellent illustrations of this was applied or reflected in her day to day life.

I think because this was my fourth interview, I was personally very comfortable with the process, having learnt and built on from my previous three interviews. Overall I was very pleased with the interview; and so far very satisfied with my data collection method.

Christina. Christina, also a BSc. student with the intention of studying medicine, is a 19 year old first year student. Originally from Namibia, she now lives with her father in Somerset West. She takes her studies very seriously, and is very determined in her efforts to focus on work. As such, she stated how she spends most of her day-light hours, when not in lectures, sleeping; and prefers to do all her university work at night through to the early hours of the morning. This was due to there being fewer to no distractions on her mobile phone during these hours in comparison to during the day. Interestingly, and what I perceive to be outside the norms and expectations of student CMC use, Christina does not actively use Facebook, and states that she only logs on roughly once a month. This was something that I was very intrigued by, and really enjoyed her practical and pragmatic approach. However, therefore she could not provide much knowledge or experience regarding Facebook use and perceptions. On the other hand though, she was far more critical of others use of Facebook when in her presence. This gave me a real taste for what it feels like for someone who does not normally go on Facebook, to have a friend access it on their mobile phone in her presence.

She does not live in university residence, but lives in private accommodation just off campus, close enough to walk. What is interesting about her accommodation is that her and her roommates feel much more comfortable to engage in CMC interactions with others, instead of talking to one another FTF. She explained that if they sit around the table eating dinner, no one talks to each other, they only use their phones. She was very clear in explaining her feelings of awkwardness and challenge in having to start and maintain FTF conversations.

Overall I thoroughly enjoyed this interview, and so far am impressed that all of the participants I have interviewed thus far have been of such diverse personality, character and background; yet their experiences are so similar. I think it is likely I will face some challenges in transcribing this interview, as many of Christina's sentences and thought process were not fully explained, and often cut short, by her difficulty to find the right words. Although she speaks English fluently, I perceive that it is not actually her first language.

Daniel. Daniel is a 24 year old male from Cape Town. He took a gap year in the UK after high school, and has been at Stellenbosch for the past 6 years at Stellenbosch, having graduated with his BA, and now studying towards an LLB; he expects to graduate at the end of this year (2014). I was immediately struck by how similar Daniel and I were in terms of experiences and personality; as well as in regard to our use (or lack thereof) of CMC in general, and not giving it a central or important role in our lives. As such I found this interview to be very enjoyable for me, and really appreciated so much of Daniels account. He provided some incredible insight, and added a very interesting dynamic to CMC, explaining his difficulty in its expected use in courtship, and finding or approaching girls he was interested in.

With Daniel being the same age as me, there was a lot of his experiences and perceptions that I could relate to. I recognise here especially the importance of not letting my own perspectives and opinions cloud those he provided. By sticking true to his quotes and personal meaning making, and treating his case the exact same as all the others, I don't think this will be difficult to achieve. In a sense I am indeed grateful to have interviewed him, because I don't have to worry about my own experience not being included in this study – as he covers them all so well, and with far more depth, intellect and thought than I might have managed had I been interviewed. He is the middle child, having an older and younger sister, and offered incredible insight regarding how he compares his use of CMC to that of his sisters, and identifies his younger sister to be using CMC most prevalently, and in ways that are potential obsessive. He also offered another dynamic, by relaying his mother's use of CMC.

Thomas. A 21 year old BA student from Botswana, Thomas initially struck me as someone who would be very caught up in impression management and maintain a certain image in order to achieve popularity and status on campus. While these certainly were elements of importance to him, Thomas struck me with his consideration and thought regarding CMC use, and questioning its relevance and role in his life and those of his close friends and housemates. He really offered a great account of why students use CMC devices in everything they do, namely because everything is on there, and provided me with an incredible understanding in this regard. Being an individual whose focus is not so much on the academic side of life, but more on the social side, Thomas brought an a great novelty and dynamic to the interviews that I have thus far done. Yes I was also very impressed by his intellect displayed during the interview. He especially identified the difficulty in being “introduced” to girls on Facebook or Instagram, before meeting them in person. In this regard he highlighted how judgements made based on photographs and wall posts were not ideal because they often did not match the person FTF, but was a normal and expected thing to do. He was also very honest in describing his use of CMC both during class and private study time, and provided very clear illustrations of his struggle with being distracted by it, and how he had found to overcome this issue.

Once again I am very pleased with the dynamic and diversity that Thomas brings to the participant pool, and am grateful for another male opinion, perspective and shared experience to compliment the collected data. This interview was very easy and comfortable, with a very friendly atmosphere having been built almost immediately.

Beverley. Beverly is a friendly and bubbly person, she was so excited and interested to be a part of this study, and expressed her gratitude for being able to openly discuss her experiences and perceptions regarding the use of CMC in her daily life. I found this to be very positive and encouraging, and really made me enjoy the interview. An interesting experience that Beverly shared was how, when her female residence ran a fire drill, she was acutely aware that almost all of the girls had first grabbed their mobile phones, thus indicating that they were among the most important things in their lives, and objects they deemed important to save from a fire. Beverly reflected that she too had grabbed her mobile phone, but felt immense guilt that she had not taken something like her Bible, which she fundamentally acknowledges as more important to her; yet it is not what is on her mind most

of the time. She was also able to relate the importance of CMC devices for class, as they had been readily incorporated into her Chemistry class especially, but also into her Biology practical's. Thus she provided valuable insight into an aspect of university life which is increasingly being considered in the literature: should CMC be included in classroom activities and work related tasks? Additionally she highlighted the role that approval of appearance plays when one's photograph is liked on Facebook or Instagram, and Beverly related how this made her feel worthy, and felt like she belonged – an element of phenomenal value in this study.

This interview was very pleasant, and I enjoyed the fact that Beverley had written down some of the things she wanted to share with me. Although no problems have thus far occurred in the post graduate Carnegie Research Common conference room that I use to conduct my interviews, today there was a problem. The librarian interrupted the interview twice to say that the room was not 100% sound proof, and that we were talking too loudly. While indeed Beverley is a loud person, and was speaking fairly loudly, this was a very awkward situation for me, and was a barrier to the excellent rapport that Beverley and I had managed to establish. It also made us lose track of exactly where we were, and interrupted the flow of Beverley's thoughts; and in the process made her feel self-conscious. Furthermore, difficulty was had in Beverley not being all that confident in speaking in English; although she is fluent, at times she struggled to get her thoughts and feelings across clearly.

Simon. This was an incredibly interesting interview for me, but also proved to be fairly challenging. Simon is a 23 year old student completing his Masters in Sociology. As such, he was very analytical of the questions, and seemingly over thought them from a technical point of view instead of merely just sharing his thoughts, perceptions and experiences. Unlike any of the participants I have thus far interviewed, Simon is very strict about the privacy policies of his Facebook account in particular. This I found to be very interesting, and it shed valuable light on an aspect, and perspective, of Facebook which I was not at all familiar with.

Very valuably Simon brought to light the association between Erving Goffman's work and theories in relation to the use of CMC, which proved to be immensely invaluable in me research, and encouraged me to consider this more in my research. In line with this, Simon explained how he views different social media platforms as being opportunities for

individuals to express and portray different images – moulding these portrayals according to the perceived norms of the medium.

While I would not go so far as to say that Simon and I did not build good rapport with one another, I certainly did struggle in trying to make him warm up and be at ease in the interview process. At times this did affect me negatively, making me not want to probably or try harder in encouraging Simon to share his experiences. Simon also explained well the intricate role of CMC devices, and their use as being intertwined in his daily life as the functions they offer are so central to everything he needs to do as a student, including use of a daily planner, alarm clock, and easy tool for accessing his email.

Abie. Abie is a 25 year old student currently in her first year at university. She brought a huge amount of diversity to the findings so far, because, unlike almost every other participant I have thus far interviewed, she has worked in various occupations before committing to an undergraduate degree she was interested in. Most of the work she has done to date has been as a singer, and she has travelled both locally and internationally to perform, always with other musicians and singers. She brought such enthusiasm to the interview, and was open to sharing her experiences and perceptions regarding CMC use.

What I most enjoyed about this interview was that she highlighted a concern for herself, namely that when she engages too acutely on her mobile phone, that she misses out on so much that is happening around her. Her perceptions of others use were very similar in this regard. She went further to state that she didn't think people were really doing life anymore, which I think to be incredibly profound. Another element of interest in this interview with Abie was that, because she had never been to university before, and had befriended a huge variety of individuals on social media, she was not concerned with adhering to the norms within the student culture, and did not express a desire to belong or do what everyone else was doing. Yet what is so interesting is that her account is not unlike almost all the accounts that I have thus far heard.

Nicholas. This interview was by far the most difficult to organise, for Nicholas was regularly having to cancel at the last minute, or simply didn't show up at all. He was one of the primary motives for me resorting to use of Whatsapp in organising the interviews over the

use of email, which I had previously made use of. However I really appreciate the contribution he made to the study. Nicholas is 19 years old and comes from Johannesburg, thus he is far away from his previous social system, and the support of family and old high school friends. This was a topic he chose to mention at will, and highlighted the ease the CMC provided in making one feel like whoever they want to speak to is right there, at their finger tips or in their pocket.

Niholas also offered a unique perspective on the notion of “Facebook friends” versus actual friends, stating that he has well over 3000 friends, and that he will accept anyone who sends him a friends request. In this regard he is a very open and sociable individual. His take on the use of Facebook and accepting of Facebook friends was different to every student I have interviewed so far. He also provided incredible insight to CMC use, relating it to his felt need to smoke – such that it gives him something to do instead of standing alone, thus relieving social pressures that one should not be alone without reason or activity.

Overall this was an outstanding interview, and I once again was so grateful for more of a “male voice” to be present in the research, evening out the findings, and offering the potential of the findings to be more appropriate and generalisable to the broader student body. Nicholas was forthcoming in the interview, findings it very comfortable to share his experiences, and thus made rapport building very easy.

Charles. This was by far my most challenging interview, because Charles was not feeling well, and was tired from a long day of class. However were able to establish a lot of similarities; both of us eager to attend Edinburgh University, and a family friend of mine being a close friend of his at boarding school. He is in his first year of University, resides in an all male residence, and is registered for a BSc. in human life sciences, although he hopes to transfer either to UCT or Edinburgh. Charles definitely came across as being quite hard on himself, and critical of his actions. However he provided incredibly valuable insight, relating his perspectives and experiences on campus when he was without a mobile phone, sharing thoughts that he had during that time, and questions that have been raised in his mind since then. He often referred to different psychological and philosophical schools of thoughts, which were at times fairly confusing for me

He also explained the interesting dynamics in the dating world of a university student, and explained how much easier was for him and his friends to disclose personal information with girls over CMC on their mobile phone, and it's use in establishing better and stronger relationships. Furthermore, he spoke about the use of a platform such as Facebook as a means of advertising himself, and that through this he was better able to build and establish a stronger and more favourable social reputation. I once again valued the diversity and originality of experience and thought that Charles contributed.

Luke. Fortunately, Luke and I were already fairly familiar with one another as we had become acquainted as members of a common student society. This made the establishment of rapport and ensuring he was at ease and comfortable with the interview easy. Luke has spent the past five years at Stellenbosch, and hopes to complete his honours in accounting this year. He is a very sociable and friendly character, and expressed a lot of frustration with his use of CMC: namely that he recognised it as both inescapable, important, and a waste of time simultaneously.

A particular element that he discussed was the importance of image display and impression management in his use of CMC, always ensuring that photographs would best display his physical features, and promote an attractive image and persona to girls. He also indicated his huge struggle with use of CMC and it's distractibility during essential times of study. Accordingly he has had to consider various techniques to avoid being too badly distracted by things such as his phone; but then also highlighted the social difficulties one experiences when not having their phone on them. However, it was also a fairly difficult time for him, as he was experiencing immense stress and pressure academically; as such this may have impeded the outcome of the interview somewhat. Either way, was very satisfied with the results, and his shared experiences.

Sarah. Sarah was the last person I interviewed, and by this stage I have learnt so much from my previous experiences that it was very smooth and easy going. Sarah is a Bachelor of law and accounting student, and is originally from Namibia. Although German is her first language, she is fluent in English and her excellent command of the language results in their being no language barriers. As a high achieving student, Sarah offered some excellent

thoughts on the use of CMC and its ease of distraction during studies. However, it is interesting to note that she stated not being tempted to use her mobile phone or tablet during lecture times – something that no other student had indicated.

She highlighted the use of something such as Facebook to create and express a pretend image, because that is what you believe you have to do and what everyone else is doing. This was furthermore linked to the desire to indicate that you have a good, if not superior, quality of life. This interview went of very smoothly, and Sarah indicated great interest in the topic, and enjoyment in participating in the interview.

Appendix I

Turnitin Report

No we don't have WiFi. Talk to each other: Understanding the dynamics of computer-mediated communication and its impact on well-being

by Andrew Jonathan Maile

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