(Hyper)Connectivity: Does it have any real effects?

The Case of Facebook

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ABSTRACT

This thesis tries to explore the connection between (hyper)connectivity and its tendencies towards university student's wellbeing and academic performance. Facebook was used as a case study in this research because it is the most popular social networking site in the world. Focus group interviews were conducted with a sample consisting of 19 master and pre-master university students following management, finance or law programmes. The results showed no strong relationship between hyperconnectivity via Facebook use, wellbeing and academic performance. This lack of relationship could be due to an unsuitable conceptual model which oversimplified the reality. While there is evidence of both positive and negative tendencies of Facebook use and connectivity towards students' study habits and academic preparation, no conclusive statements can be made. The issue of students feeling addicted to Facebook and to their mobile phones arose, however, it could not be fully explored within the scope of this research. In conclusion it can be argued that students are aware of having a choice when it comes to staying connected or not and that they exercise this decision-making power accordingly. They are not victims of technology and connectivity as some academics would argue, they form and reform technology and their habits of using it. This makes it a rather difficult issue to study, as it is constantly changing and evolving. Several possibilities for future research would include using a more complex conceptual model that is more representative of the real world interactions between the variables as well as focusing on possible age and status comparisons between bachelor and master students or exploring similarities and differences between mobile phone and Facebook addiction.

Key words: *connectivity, hyperconnectivity, Facebook, wellbeing, academic performance*

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TABLE OF CONTENTS

1. INTRODUCTION

Much has changed in our society in the recent years with regards to people's personal as well as professional lives. Several factors such as various technologies and changing cultural and societal values and attitudes (Stohl & Cheney, 2001) have resulted in faster-paced and more connected lives (Wajcman, 2008) compared to the ones of our parents. There is an increased buzz on the online channels about the 'hyperconnectivity' and what it means for us, the users of social networking sites (SNS) and other instant messaging platforms, who are becoming increasingly connected every day. Social media such as Facebook, Twitter and WhatsApp have developed into being increasingly omnipresent in the existing society and therefore they have become a relevant and contemporary research topic (Verdegem, 2011).

The focus of this thesis is the relatively new need to be omnipresent, or in other words, the constant need to be online (Katz, 2006, 2008; Kubitschko & Knapp, 2012). Whether this need is one's own or whether it is a need placed by others will be discussed later in this thesis. It is already happening in the business world, managers are expected to read and respond to their emails at any hour of any day, regardless whether it is late evening, a weekend or a holiday. The other managers, their superiors and their clients expect them to be online. However, it is also applicable the other way around. Because one is aware of this need placed on him or her by others, they feel the need to be constantly online so that they can fulfil such expectations. Perlow (2012) coined this phenomenon as 'cycle of responsiveness' which will be further explained in the theoretical framework.

Although the presence of this phenomenon is undeniable in the business context, not much attention has been paid to it outside of the business world. The need for omnipresence is understandable in the corporate setting because of various work-related expectations and it may become something close to an addiction (Perlow, 2012). However, it is likely that younger generations, such as current university students, develop this habit at an earlier stage, long before they enter the business world. Current university students are increasingly connected to SNS such as Facebook and this occurrence is likely to have effects on their performance, 'offline' social lives as well as

their wellbeing. In the long-term it is also likely to have certain influence on how they will be able to deal with the required omnipresence in their future working environments.

It would be beneficial to the business community to know what kind of graduates they should expect. They could also benefit from knowing their habits and attitudes towards the expectations of omnipresence and whether the graduates themselves feel the need to be omnipresent. However, it may be necessary to adjust the context with regards to several concepts. In the case of university students it is rather the hyperconnectivity that is being the concern as omnipresence is more related to the business world. Hyperconnectivity is closely related to the media students use such as Facebook and WhatsApp and how they use them. This study focuses specifically on Facebook since it is the most popular social networking site among students and has had rather significant effects on how young people communicate. Facebook will be used as the core case study of this thesis, however, the main focus remains on the possible effects of (hyper)connectivity on university students' wellbeing and performance and it is therefore possible that other instant messaging services such as Whatsapp will be discussed in connection to connectivity, the overarching topic of this thesis.

Facebook has been in the academic spotlight for years, especially since its fast and unexpected rise to worldwide popularity. A lot of research has been done regarding Facebook, the reasons for its use as well as its impacts on, for example, identity construction (Gangadharbatla, 2008; Nadkarni & Hofmann, 2012). Valkenburg, Peter & Schouten, (2006), explored the possible consequences of friend networking sites, such as Facebook, for adolescents' social self-esteem and wellbeing. They argue that ''peer acceptance and interpersonal feedback on the self are vital predictors of social self-esteem and wellbeing in adolescence'' (p. 584). They define wellbeing as ''a judgment of one's satisfaction with life as a whole'' (p. 585). Although there has not been established a clear causation between self-esteem and wellbeing, in their research Valkenburg et al. (2006) suggest that ''self-esteem is the cause and wellbeing the effect'' (p. 585).

However, in their article, Ellison, Steinfield and Lampe (2007) offer a slightly different point of view. They focus on the concept of subjective wellbeing which consists, and is usually measured by, self-esteem and satisfaction in life. Whereas Valkenburg et al. (2006) view self-esteem and wellbeing as two different entities, Ellison et al. (2007) see self-esteem as part of subjective wellbeing. It is important to notice that Valkenburg et

al.'s (2006) research focuses on adolescents while this thesis focuses on university students who are likely to experience Facebook in different ways than adolescents (Ellison et al., 2007).

Therefore, since there has been quite a lot of research done with regards to why people are present online and are active on Facebook, this thesis will focus on how their connectedness affects their wellbeing and university performance and whether the feeling of (peer) pressure plays an active role in this relationship. At the end of this research the paper should provide the readers with some effective communication strategies for dealing with social pressure 'forcing' us to be online and connected at all times.

It is important to acknowledge the rising trend of hyperconnectivity in our society and start developing effective strategies that could help people deal with this trend when they feel overwhelmed. Certain Facebook and WhatsApp features allowing people for tracking other users' behaviour, such as the 'seen' notifications, may contribute to the feeling of peer pressure since the senders of the message(s) can see when exactly the receiver was last online.

Another aspect that could contribute towards the feeling of peer pressure is the expected flexibility in time and space. Similarly to employees, students may expect each other to answer messages wherever they are, be it in class, family dinner or in a cinema, thus, they expect each other to be flexible in space as well as in time. Since other students may become aware of these expectations, they may adjust their own habits and indeed start checking their Facebook account during meals and movies. This leads us to the overarching research question:

RQ: How does university students' increased connectivity via Facebook affect their wellbeing and university performance?

To be more specific, *how does increased connectivity and expected flexibility in time and space and certain Facebook features allowing for tracking people's activity affect peer pressure to be online and how does this impact wellbeing of university students?*

This area of research is still relatively new, most of the researchers are only now starting to notice different effects social media, and mainly Facebook, have on students' wellbeing. Whereas at first they were mostly concerned with how Facebook affects

students' studying habits, now they are starting to take into account the bigger picture which is students' satisfaction with their lives and therefore their subjective wellbeing.

Consequently, this study has quite strong scientific relevance given the fact that the amount of research on this topic is relatively small. Although people's wellbeing has been quite extensively researched before, it has not been done with focus on (hyper)connectivity experienced through SNS and Facebook specifically. Even though the concept of (hyper)connectivity has been somewhat defined in the business context and mostly with regards to teleworking employees, the researchers have yet to make a clear connection to the context of university students and thus any kind of insights gained in this thesis will be beneficial for further research into the topic.

However, this study is not only relevant academically but also practically. The need for omnipresence in business-related context is accepted by the contemporary society and majority of the employees and managers take it as something that is necessary for the functioning of the business world. However, is this really the case? Some researchers such as Perlow (2012) suggest that the need for omnipresence and the cycle of responsiveness are damaging to people's work performance and have negative influences on their satisfaction with life and wellbeing as a whole. Therefore, it is rather concerning that students develop this need at such as early stage in life which may make the consequences even more severe.

The current and future students are the next generation workforce and future leaders and therefore it is important to know what influences their wellbeing and performance and how. If these influences are positive they should be perfected and widely spread. If they are negative they should be dealt with and eliminated. Although it is quite difficult to draw the line between positive and negative influences, it is important to be able to assess them and develop effective strategies for dealing with them. The aim of this research is to explore and evaluate the effects of increased connectivity in the case of Facebook use on university students' wellbeing and academic performance and to develop strategies that would be effective when dealing with the possible negative effects. The students themselves may be too close to see the global picture of this phenomenon, however, it has an influence on their future which makes it a topic worth researching.

In order to further elaborate on the argumentation of this thesis a theoretical framework will be presented followed by the conceptual model. Next, methodology elaborating on the chosen research method and sample will be offered. Then the results will be presented and analysed followed by a discussion section which will try to answer the research question, present any unexpected findings, elaborate on the theoretical and practical contributions of this thesis as well as outline limitations and possibilities for future research.

2. THEORETICAL FRAMEWORK

With respect to developing a comprehensive theoretical framework, several concepts need to be defined and several others need to be elaborated upon. These concepts include connectivity, expected flexibility in time and space, cycle of responsiveness, wellbeing, and academic performance. The importance of further exploring these variables is high since without their understanding we could not proceed with the research. Firstly, the independent variables will be discussed starting with connectivity and followed by expected flexibility in time and space. Although connectivity is the overarching topic of this thesis, the more specific focus is on hyperconnectivity which is a certain state of connectivity and will be explained in one of the subsections.

Secondly, the mediating variable cycle of responsiveness will be explained, specifically focusing on its origins in the business context and possible implications on the student world. Thirdly, the dependent variables wellbeing and academic/university performance will be introduced concerning different types of wellbeing followed by a brief discussion of performance and the idea of multitasking. The dependent variables will then be elaborated upon in the methodology section since they are closely related to students' Facebook usage. This theoretical framework will present the variables on their own, only referring to their connection to Facebook and other SNS when necessary. These connections will then be further discussed in the methodology section since Facebook is used as a case study in this research. This is especially the case for wellbeing and performance since there are many other possible determinants affecting them and therefore they need to be kept in focus of the case study.

2.1 CONNECTIVITY

Connectivity is a concept that has been researched and defined mainly in organisational context. Recently, several 'stages' of connectivity have been discussed and it has been suggested that more research within this area is necessary, especially with regards to employee performance and organisational culture as a whole (Kolb, Caza, & Collins, 2012). Wajcman and Rose (2011), study work interruptions in the context of knowledge workers, however, they do so with a different approach compared to the previous research. The past research presented the underlying assumption that

''interruptions divert employees' attention away from their 'real' work'' (Wajcman & Rose, 2011, p. 943) and therefore they, or their impact, have to be minimised.

However, as Wajcman and Rose (2011) argue, in this approach, employees are viewed as passive 'objects' when it comes to these interruptions and seem to have no agenda of their own. The 'old' approach fails to recognise that employees have the power to develop various ways of how to deal with these calls for their attention. Secondly, they argue that the amount of different communication channels and electronic devices such as desktop computers, smart phones and tablets, creates constant connectivity which ''may be changing the nature of knowledge work itself'' (p. 943). Wajcman and Rose (2011) challenge the existing notion of what are normal versus abnormal situations (interruptions) for knowledge workers who ''inhabit an environment where communication technologies are ubiquitous, presenting simultaneous, multiple and ever-present calls on their attention'' (p. 941). Their study points out the importance of mediated communication for carrying out daily work-related tasks and illustrate how fundamental connectivity has become in contemporary work environment.

Connectivity is sometimes defined as

> the mechanisms, processes, systems and relationships that link individuals and collectives (e.g. groups, organizations, cultures, societies) by facilitating material, informational and/or social exchange. It includes geo-physical (e.g. space, time and location), technological (e.g. information technologies and their applications) as well as social interactions and artefacts. (Kolb, 2008, p. 128).

Kolb, Caza and Collins (2012) argue that to better understand connectivity and its work related implications, it is necessary to distinguish between different states of connectivity. They suggest that 'constant' connectivity as presented in Wajcman and Rose's (2011) paper is too vague and contains too many underlying assumptions as their research focused on telecommunication workers. Therefore, Kolb, Caza and Collins (2012) introduce three states of connectivity: (hypo)connectivity, requisite connectivity and (hyper)connectivity.

2.1.1 Requisite connectivity

Requisite connectivity is the optimal state of connectivity as it provides the middle ground between the states of too little (hypo)connectivity or too much (hyper)connectivity. It refers to a ''threshold state of having an appropriate level of connectivity, one which enables effective performance of a given task or social outcome'' (Kolb, Caza, & Collins, 2012, p. 270).

2.1.2 Hypoconnectivity

If the requisite connectivity was placed in the middle of the connectivity spectrum then the extreme of hypoconnectivity would be placed on its far left. Hype-connectivity refers to a state where there is not enough connectivity for the given situation. This could occur, for example, in virtual or geographically dispersed teams when time differences or geographical distance make the face-to-face contact difficult and/or when teleconferencing is not available. In this case the team could say they have problems with hypoconnectivity.

Although unlikely, it is possible that hypoconnectivity could occur in a university context too. This could be due to various reasons such as students going on holidays while still having ongoing team coursework and 'unplugging' from the online communication resulting in them being unreachable. Another case would be that the student does not use the communication channel(s) used by other team members and therefore cannot participate in the work if this platform is used. An example would be using Facebook, Google documents or Dropbox for sharing information when one does not have the respective accounts. Whichever of these is the case, inability or conscious unwillingness to connect may results in one's worsened university performance (e. g. lower grades for group works) or worsened relationships with one's classmates.

2.1.3 Hyperconnectivity

On the other hand, in the contemporary work environment, employees are more likely to report that they are suffering from hyperconnectivity, a state which Kolb, Caza and Collins (2012) identify as a state in which too much connectivity is detrimental to performance. It is this third state of connectivity that is the focus of this thesis although it is not with regards to employees' work performance but rather with regards to university

students' wellbeing and (academic) performance. Although some evidence exists to argue that certain individuals feel comfortable with high levels of connectivity, it has been proven that, ''beyond a certain threshold, connectivity leads to distraction, ineffectiveness and burnout'' (Kolb, Caza, & Collins, 2012, p. 270). Therefore, it is essential for employee' effective and efficient performance that they reach and maintain requisite connectivity which is the most 'balanced' state.

However, reaching and maintaining the state of requisite connectivity is more easily said than done. Scholars suggest different techniques for reaching this state, however, majority of the scholarly literature is still focusing on what connectivity means in the contemporary society and only few have moved onto trying different ways of dealing with it. Some argue towards deeper understanding of the process and dealing with the (hyper)connectivity as it approaches, some, such as Perlow (2012) argue towards unplugging completely at specified times, a concept which she calls a 'predictable time off'.

Kolb, Caza, and Collins (2012) suggest that knowledge workers who successfully manage to deal with the constant income of messages experience a state of 'connective flow' which has been defines as a state ''where communication is highly effective and highly efficient and balanced in accordance with our needs and the demands of the task or situation at hand'' (Kolb, Collins, & Lind, 2008, p. 183). The important part of the definition presented above is 'our needs' since it implies that connective flow is highly individual and subjective in meaning and that the state of requisite connectivity differs per individual and as such is difficult to quantify and measure. This finding supports the growing awareness in the academic literature that the very nature of connectivity and its optimal state lies in the eye of the beholder and needs to be researched as such.

However, the literature is clear on one thing: hyperconnectivity is highly likely to have detrimental effects on people's performance, it invades people's personal time and space and may also cause, or at least contribute to, stress and anxiety (Kolb, Collins, & Lind, 2008; MacCormick, Dery, & Kolb, 2012). On the other hand, that same literature seems to disagree on what is hyperconnectivity (which is in the eye of the beholder) and how much agency do the individuals have when deciding their state of connectivity. To better explore individuals' freedom of choice and agency two concepts will be discussed next: expected flexibility in time and space and cycle of responsiveness.

2.2 Expected flexibility in time and space

As Stohl and Cheney (2001) point out ''the introductions of new technologies designed to save time often result in an acceleration of the pace of life'' (p. 354). Technologies offer many paradoxes and this is one of them. Due to technological developments, the expected flexibility in time and space has increased. Although this may not be a paradox, after all, some of the technologies were meant to increase workers' flexibility, there is little knowledge about the effects of this flexibility on the workers themselves. It is also important to note that the issue gets more complex when we also consider expected flexibility in time in space. This means that whether people are flexible in time and space is one thing. However, it is the 'expected' flexibility that may be cause for concern: people live their lives faster than before and yet they are expected to be even more flexible.

2.2.1 Connectivity paradox

Another paradox is known as the 'connectivity paradox' which is discussed with regards to teleworking. Fonner and Roloff (2012) explain that the paradox tends to occur ''as the connectivity afforded by communicating using various media enables remote work by increasing a sense of presence and connectedness but also negates the benefits of remote work by generating interruptions that may threaten teleworkers' flexibility, focus, and autonomy'' (p. 206). The relevance of this paradox for this study lies in its second part which suggests that there may be some negative sides to connectivity such as the possibility that ''the use of various communication media also enables unwanted and distracting interactions'' (Fonner & Roloff, 2012, p. 210).

The general idea behind teleworking is that it enables the employees to remove themselves from workplace communication they wish to avoid as well as it helps them establish time to work without any interruptions. Because of their withdrawal from the office life encompassing, among other things, meetings, office politics and information overload, the teleworkers have a better control over their own uninterrupted working time. However, as Fonner and Roloff (2012) argue, due to recent technologies which allow for rich and data-intensive communication, teleworkers may find it more difficult to keep their uninterrupted working time and maintain certain distance from the office life.

This increased connectivity exposes the employees to what they have tried to avoid in the first place: meetings, colleagues' requests for help as well as colleagues just 'popping by' to ask a question. All of these situations may be perceived as unwelcome interruptions and ''may generate feelings of stress and time pressure as employees strive to accomplish tasks'' (Fonner & Roloff, 2012, 210). Fonner and Roloff (2012) suggest that if the teleworkers do not want to be exposed to such interruptions they will need to learn to strategically disconnect or make themselves unavailable in some other way. If they do not find a way how to do this they may as well go back to working in the office.

2.3 CYCLE OF RESPONSIVENESS

'Cycle of responsiveness' is a term coined by Leslie Perlow (2012) in her book called 'Sleeping with your Smartphone'. Although the book is rather a 'how-to' guide than pure academic research, it introduces several interesting concepts and strategies for dealing with the, somehow vicious, cycle of responsiveness. The cycle provides a rather comprehensive explanation why business people are and feel pressured to be constantly online and why and how they put this pressure on their colleagues. Perlow (2012) explains that the initial pressure to be online tends to start with a more-or-less legitimate reasons such as accommodating requests from customers or colleagues in different time zones. Usually this becomes a rather common occurrence and thus people start adjusting to such demands in various ways. In order to be able to fulfil these requests on their time they begin to use different technologies, adapt their daily professional and personal schedules as well as change the way they interact with their family and friends.

However, once people start accommodating these demands on a daily basis, the cycle becomes even more demanding. When the colleagues start experiencing the increased responsiveness, they expand their own requests. This means that the people need to be even more responsive unless they want to be labelled as the 'less committed' members of the workforce. As Perlow (2012) points out: ''and thus the cycle spins: teammates, superiors and subordinates continue to make more requests, and conscientious employees accept these marginal increases in demands on their time, while their expectations of each other (and themselves) rise accordingly'' (p. 8). Due to everyone's demands the cycle grows and becomes rather vicious with no one being able

to, or willing to, break away from it. Perlow (2012) argues that people put the pressure on themselves and suggests a strategy to deal with it. She calls it 'predictable time off'.

As has been shown in the literature, expected flexibility in time and space as well as hyperconnectivity are likely to result in the cycle of responsiveness. Although hyperconnectivity and expected flexibility in time and space may sound as the same thing, they differ from each other. They are of course related to a similar issue and one could argue that they are two sides of the same coin. While hyperconnectivity refers to a state, a situation or a process where too much connectivity between parties is detrimental to performance and task at hand as a whole, expected flexibility in time and space refers to the expectations of one's social circle and implies pressure to be connected and responsive to others' calls and messages. With this distinction in mind, the following two propositions will be argued in this thesis:

P1a: *Expected flexibility in time and space will result in a cycle of responsiveness causing students to feel pressured to answer their Facebook communication.*

P1b: *Hyperconnectivity will result in a cycle of responsiveness causing students to feel pressured to answer their Facebook communication.*

2.4 WELLBEING

Wellbeing has been at the centre of research by behavioural scientists for decades. It has been extensively researched with regards to the internet usage but only recently has it been connected to Facebook use (Kalpidou, Costin, & Morris, 2011). It has been established that the psychological consequences of the Internet depend on the purpose of an individual for using it (Weiser, 2001). Nadkarni and Hofmann (2012) identify the two main reasons for using Facebook and explain it using a dual-factor model of Facebook use. They claim that Facebook use is ''primarily motivated by two basic social needs: (1) the need to belong, and (2) the need for self-presentation'' (p. 245). They define the need to belong as one of fundamental drives to ''affiliate with others and gain social acceptance'' (p. 245), and the need for self-presentation as ''the continuous process of impression management'' (p. 245). The dual-factor model illustrates that both of these two factors can be cause for Facebook use on their own as well as when they are combined.

2.4.1 University Students' Wellbeing

Masters (2004) defines five different 'aspects' of wellbeing applicable to university students although he cautions that in reality all five are closely interconnected and it is hard to draw an exact line between them. These aspects are: mental, physical, social, spiritual, and emotional. Unfortunately, there is not a high number of research focusing specifically on one of these aspects and general Facebook use. Majority of current studies explore wellbeing with regards to the mental and emotional aspects, however, this topic will be more closely introduced in methodology section number 3.2.4.

2.5 Academic (University) Performance

Although there is a relatively large amount of existing research regarding academic performance, the researchers have not yet come to an agreement about majority of the issues related to it. One of the main reasons behind this lack of agreement is that performance as such is rather difficult to measure and different studies operationalise it differently leading to sometimes even contradictory results. Some academics measure performance by using self-reported grade point average (GPA), others take into consideration multiple number of factors such as student's status (bachelor or master) and student's major since different majors are likely to be graded differently (Kirschner & Karpinski, 2010). For example, a major in math or finance is likely to receive higher grades on his exams since he either solves the mathematical problem or not. On the other hand a student in humanities or social sciences is less likely to receive such high grades because with this area of study there is always room for improvement of any given answer.

With emergence of technology academic performance has been studied first with regards to computers, then to Internet and now with regards to SNS and sometimes even Facebook specifically. According to Shah, Subramanian, Rouis and Limayem (2012), there is no agreement whether computer use (sometimes also researched in connection with the internet use or the use of SNS) has positive or negative effects on academic performance. Some researchers argue that it has strong positive effects, others argue that it has strong negative effects and leads to significantly lowered academic performance, however, the results vary in their significance and validity with regards to how indicative they are of the studied population. On the other hand, some academics

such as Shah et al. (2012) acknowledge both the positive and the negative effects of computer, internet and SNS use and focus on identifying these differences and then further elaborating on their implications. Nevertheless, it is important to note that computer use on itself is too broad of a concept in the current society because students can use it to write essays, look for information, as well as play games or be active on SNS.

There is a very common assumption that the modern youth and young adults, also referred to as 'Homo Zappiens', are radically different from the generations before them and that they are masters at multitasking, social networking as well as many other technology-related activities. Born in the 1980s and 1990s they are said to be immersed in technology almost since the day they were born and supposedly possess ''specific new multitasking skills that they are able to apply in a learning setting, and that education as we know it is frustrating them in the application of these multitasking skills'' (Kirschner & Karpinski, 2010, p. 1237).

According to Kirschner and Karpinski (2010), multitasking is ''the simultaneous execution of two or more processing activities at the same time'' (p. 1238). They also argue that human brains can only multitask that which is automated such as chewing gum or walking and talking and therefore when people refer to multitasking with 'processing' activities they are talking about the ability to switch quickly from one activity to another. It has been proven that such switching between activities, leads to lower efficiency while accomplishing the given task (Ophira, Nass & Wagner, 2009). For example, if a student is calculating algebra and sending and receiving chat messages 'at the same time' it will take him or her longer to accomplish each individual task than if he/she dealt with them one by one in a sequential order (Wallis, 2006).

In a specifically learning and reading comprehension related study, Fox, Rosen and Crawford (2008) found out that reading comprehension between graduate students who were using instant messaging and those who were not did not change. However, students using instant messaging needed significantly more time to complete the comprehension tests and they also took longer to read the passages given to them. Although this may not be a problem for short texts, it could be considered an inefficient use for time when students have to complete multiple pages long assignments. Additionally, Fox et al. (2008) also found a negative relationship between the reading comprehension scores, the time spent using instant messaging services and overall GPA reported by the participants.

A study by Kvavik (2005) found that even though the generation of people born in the 1980s and 1990s is supposedly immersed in technology and has deep knowledge of it, this knowledge is often limited to basic skills such as surfing on the internet, text messaging, Facebook and so on. He argues that students find it difficult to use the technology they already have for more complicated things and they also ''appear to be slower developing adequate skills in using information technology in support of their academic activities which limits technology's current value to the institution'' (Kvavik, 2005, p. 7.17). For example, online sharing technologies such as Dropbox or Google Drive can be very useful for project collaboration, however, their use is not as widely spread as it could be. Similarly, just because students know to go to Google Scholar to look for articles it does not mean they know how to search for them efficiently.

Perlow (2012) implies that cycle of responsiveness as such is not beneficial to performance or wellbeing since it is likely to create and cause pressure at the same time, amplifying the effects and spreading it to more people who then get 'dragged' into it. Therefore, once the students become part of the cycle of responsiveness they are unlikely to 'escape' from it without conscious efforts to do so. Some students may not be aware how connected or responsive they have become and they may consider it 'normal' therefore they may not feel pressured into being responsive. However, it is also possible that they feel the pressure but are unsure of how to act and what steps to take. This may result in decrease in their satisfaction with life and academic performance as is proposed below:

P2a: *Being in a cycle of responsiveness will negatively influence student's wellbeing.*

P2b: *Being in a cycle of responsiveness will negatively influence student's university performance.*

If these propositions are correct, then it is necessary to suggest strategies for exiting the cycle of responsiveness so that students' wellbeing and performance are not controlled by their hyperconnectivity and by expected flexibility in time and space placed on them by others. However, as Perlow (2012) points out, exiting cycle of responsiveness is very difficult in the business world and the same could be true for university students. According to the dual-factor model of Facebook use there are several needs that drive Facebook use and these are unlikely to become obsolete. Therefore, if it proves to be impossible to exit the cycle of responsiveness then the strategies should focus on, at

least, suggesting techniques for staying on the 'outskirts' of the cycle rather than being caught right in the middle of it.

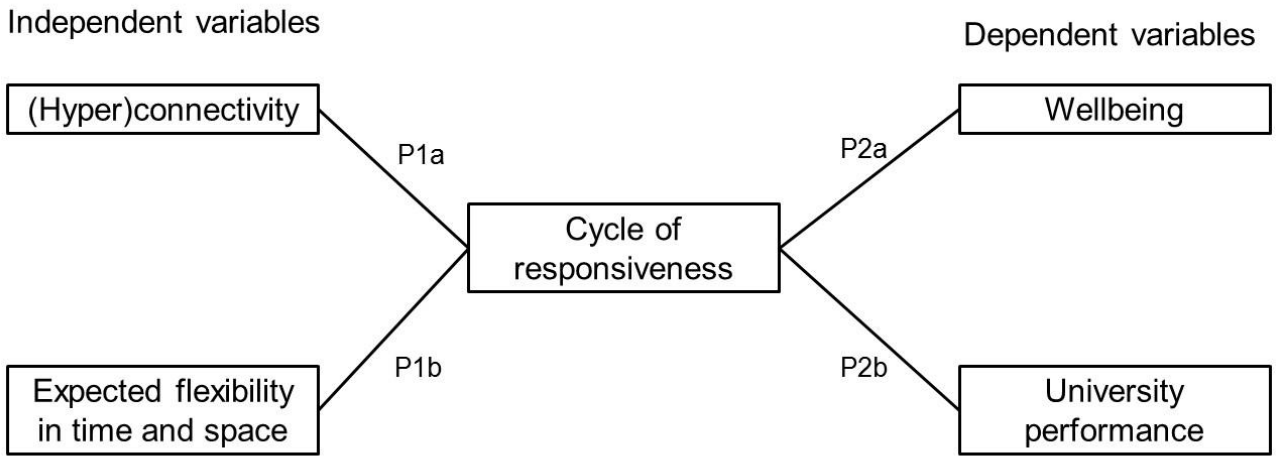
2.6 CONCEPTUAL MODEL

Although using conceptual models, also known as conceptual frameworks or research models is rather uncommon in qualitative research, there are several advantages of doing so. According to Doorewaard (2010), ''a conceptual model is a simplification of reality'' (p. 206). He argues that when a study is based on deductive case study approach and relies on using existing theories, conceptual models are a very useful tool as ''the researcher develops the assumptions concerning the relationships between the core concepts by basing them on a theory'' (p. 206). Jabareen (2009) defines conceptual framework as a ''network, or 'a plane,' of interlinked concepts that together provide a comprehensive understanding of a phenomenon or phenomena. The concepts that constitute a conceptual framework support one another, articulate their respective phenomena, and establish a framework-specific philosophy'' (p. 51). Conceptual models may be used in several ways and in several stages of the research such as framing research projects, reducing data and analysing themes (Daley, 2004).

In this thesis, the conceptual model is used quite early on to ''guide the research by providing a visual representation of theoretical constructs (and variables) of interest'' (Stanford Institute for Higher Education Research, 2003, para. 1). Therefore, conceptual models are used in qualitative research to clarify researcher's development of ideas about the phenomena under study and to provide a visual illustration of various relationships between variables (Maxwell, 1998). As Doorewaard (2010) explains, ''it is a schematic representation of the core concepts (the variables) of a research project and of the assumed causal relationships between these core concepts'' (p. 206).

Its main aim in this research is not to test the presented theories but to visualise them in order to create a comprehensible visual model of the propositions introduced above. The conceptual model in this thesis is presenting a mediating effect of cycle of responsiveness. For example, based on the conceptual model presenting the earlier introduced propositions we expect that (hyper)connectivity will lead to students entering cycle of responsiveness which will in turn affect their wellbeing. In conclusion, if the conceptual model is well designed it can help the researchers define their research

subject and clearly formulate and visualise the assumptions they make when proposing certain relationships between the core concepts.



3. METHODOLOGY

3.1 FACEBOOK AS A CASE STUDY

Facebook is being used as a case study in this research due to the fact that it is the most popular social networking site. The overarching topic of this thesis is connectivity, however, as such it is extremely broad and for the purpose and scope of this thesis it was preferable to study it from a more focused perspective. The following subsections explain the proposed connections between Facebook use and (hyper)connectivity, expected flexibility in time and space, cycle of responsiveness, university students' wellbeing and their academic performance.

3.2 FACEBOOK USE

3.2.1 FACEBOOK USE AND (HYPER)CONNECTIVITY

Although connectivity and wellbeing have been presented earlier on, it has been done with a focus on the concepts themselves. However, since this thesis focuses on these concepts with connection to Facebook, they need to be discussed when they are applied to Facebook as a case. Although Facebook as such is probably no longer considered as a new research 'phenomenon', its effects on the current society has not stopped developing and therefore it is a topic relevant to the academic research. The changes possibly caused or initiated by Facebook, or even those in which Facebook plays some kind of role are phenomena that should be studied from various perspectives and in different academic disciplines. Nevertheless, the research in some areas with regards to Facebook has been rather limited leaving us with a gap in the existing literature which this thesis will try to at least partially address.

For example, with regards to connectivity and hyperconnectivity, majority of the research is interested in how much time the respondents spend on Facebook on a daily basis. However, this question is losing on relevance given the fact that majority of young adults and adults have a smartphone which means that they either have a 3G connection or that they are able to connect to the internet via Wi-Fi. This being said, it also means that one has the possibility to be on Facebook 'constantly', wherever they are. The questions of the time spent on Facebook is not nearly as relevant as the question of 'access' to Facebook or how 'fast' people are when it comes to checking Facebook

notifications. If a person wakes up at 4 o'clock in the morning to check their messages it may only take them five minutes but the implications of such an action, waking up in the middle of the night to answer a message, are very different to answering the message during class or while sitting in a train or doctor's waiting room.

3.2.2 Facebook and expected flexibility in time and space

Unfortunately there is no academic literature specifically addressing the issue of expected flexibility in time and space since it is a concept developed in the business world and refers to being flexible with regards to work responsibilities. However, this does not mean that it cannot be applied to Facebook and university students. Similarly to business professionals accessing their e-mails on their smartphones, it is possible for students to access their Facebook accounts wherever they are if they have 3G or 4G or whenever they have access to WiFi. This means that they are flexible in time and space when it comes to their ability to be on Facebook and therefore it is possible they expect their peers to exercise the same flexibility.

3.2.3 Facebook and cycle of responsiveness

If students expect their friends and classmates to be flexible in time and space it may lead them to enter cycle of responsiveness when they will almost force each other to be active on Facebook. Facebook has different working mechanisms that allow for different actions to be taken, Junco (2011) divides them between communicative (e.g. commenting or RSVPing to events) and non-communicative activities (e.g. playing games or checking up on friends). For example, it is possible to send friend requests to people, post status updates and upload pictures, tag your friends in those updates as well as check in at different locations. These features have been in place for some time now. Nevertheless, there is a relatively new feature that has not been researched yet, one that allows for greater 'surveillance' of other people. Before this feature was introduced it was possible to send private messages to people and then wait for a response. However, with this new feature people are able to see when the certain person read the message which may lead to certain expectations.

Using the 'Ticker' function it has been possible to see whether certain people were online if they 'liked' or commented on something. However, the 'seen' feature allows the person to see the exact time the message was read. This may have both positive and negative implications. On one hand, the sender of the message is able to check whether the message was read and whether the receiver is informed by the content of that message. On the other hand, if the sender is awaiting an immediate reply they might be left wondering why that has not been the case and the receiver of that message cannot use the excuse 'I have not read it yet' since they know otherwise.

This leads us back to the argument of expected flexibility in time and space and the cycle of responsiveness. Although these concepts originated in the business world they are applicable to students and their (hyper)connectivity, or in other words, their need to be constantly online. Majority of the students own smartphones and therefore they can access their Facebook accounts whenever and wherever they want. Because they all know they have Facebook on their smartphones they expect each other to respond to messages at all times. It is almost too easy to check one's phone during dinners, classes or movies. And now that people can see when the message has been read they have the 'right' to expect an immediate reply. There is an assumption present: if the user had enough time to read the message they have enough time to respond to it too. In this assumption people expect a rather immediate answer once the message has been read and the receiver of this message is well aware of this expectation. This may possibly lead to the feeling of peer pressure and therefore stress which could in turn decrease student's wellbeing and academic performance.

3.2.4 Facebook and wellbeing

With regards to Facebook and its connection to wellbeing, there has been some research focusing on mental wellbeing and Facebook use but it has not drawn any generalizable results. Rosen, Whaling, Rab, Carrier, and Cheever (2013) explored the link between clinical symptoms of psychiatric disorders such as narcissism and technology use, attitude and anxiety with focus on several communication technologies and media, Facebook being one of them. They surveyed 1143 adults and concluded that Facebook use is a significant predictor for psychiatric disorders. For example, ''Facebook use accounted for five of the nine significant predictors with general use, impression

management and friends negatively predicting mania while having more friends predicted fewer signs of major depression and dysthymia'' (p. 1251).

Kalpidou et al. (2011) claim that there is a strong significant relationship between Facebook variables and psychological wellbeing. They found that that there was a negative relationship between spending a lot of time on Facebook and students' self-esteem. The study also argues that in the case of first year students with many Facebook friends, Facebook does not fulfil their emotional needs. On the other hand, it was also reported that ''having a lot of Facebook friends was positively related to both social adjustment and attachment with the institution for upper-class students'' (p. 187). This finding proves that ''Facebook strengthens social adjustment by improving social networks'' (p.187). Kalpidou et al. (2011) define social adjustment as ''fitting in with the college community and being satisfied with established social connections and the social activities offered'' (p. 187). This definition is slightly similar to the one of wellbeing, namely in the fact that it included one's satisfaction with life as a factor. However, another important finding of their study is that this negative relationship between Facebook use and university wellbeing occurred only among college freshmen and not among older students. From a research perspective college freshmen are viewed as a rather vulnerable population due to the fact that they are adjusting to new environment and therefore are more open to various influences (LaRose, Wohn, Ellison & Steinfield, 2011).

3.2.5 Facebook and academic performance

Adding Facebook use to academic performance has not made the concept or its implications any clearer than when it was discussed on its own. The only consensus researchers have reached with regards to this topic is that more research needs to be done assessing the effects of students' use of SNS on their academic performance as the existing studies seem to arrive at sometimes very different conclusions (Kirschner & Karpinski, 2010; Pasek, More & Hargittai, 2009; Shah et al., 2012). For example, as Pasek et al. (2009) point out, although the time students spent on SNS may detract them from studying, there is too little empirical evidence to suggest any significant negative effects on their academic performance. Similarly, Shah et al. (2012), found that ''instead of degrading academic performance certain aspect of social media use aids in increasing it''

(p. 7). They also argue that from a student's perspective social media use is helpful in aiding them accomplish their academic results (such as using ties formed via Facebook for academic purposes) and therefore their heavy Facebook usage continues and is justified in their eyes. As Junco, Heiberger and Loken (2011) argue, communication and resulting socialisation between students about the academic course content leads to greater gains in academic performance. Shah et al. (2012) suggest that rather than forbidding social media use in classrooms the staff should encourage the students to use it in ''certain manner that is not in line with the student's motivation to use such systems'' (p. 7) since students perceive social media use as useful.

On the other hand, Kirschner and Karpinski (2010) arrive at very different conclusions in their study. One of their key findings is that students who use Facebook reported having a lower mean GPA and spending fewer hours per week studying than students who do not use Facebook. Interestingly, both groups reported spending the same amount of time on the internet which lead Kirschner and Karpinski (2010) to conclusion that ''clearly, there is a difference between the study strategies of FB users and nonusers'' (p. 1243). Similarly, Jacobsen and Forste (2011) found that ''electronic media use is negatively associated with grades'' (p. 279). They add that more than two thirds of the respondents stated they use electronic media while they are in class, doing homework or studying. Jacobsen et al. (2011) deliberate that these 'multitasking' efforts are likely to cause increased distraction which could lead to lower academic performance.

However, although in accordance with Kirscher and Karpinski's (2010) findings, Jacobsen et al. (2011) only focus on first year students. The second key finding of Kirscher and Karpinski's (2010) study is that graduate students reported higher mean GPAs than undergraduate students suggesting that negative influence of Facebook use on academic performance is more prominent in the case of undergraduate students than with graduate students. This could be due to the fact that first years students are still adjusting to new college life and are looking for a balance between social and academic activities.

In accordance with findings by Kirschner and Karpinski (2010) and Jacobsen et al. (2011), Junco (2012) also discovered that ''time spent on Facebook was strongly negatively predicted of overall college GPA'' (p. 195). Conversely, he also found that checking Facebook was a weak negative predictor of overall GPA suggesting that spending time on Facebook and checking Facebook are two different behaviours. Another

interesting finding is that ''time spent on the academic task of studying does not seem to be influenced by the time spent on Facebook even though time spent on Facebook is negatively related to GPA'' (p. 196). Therefore, it could be argued that Facebook use on itself is not detrimental to GPA or to time spent on studying. Rather it seems that large amount of time spent on Facebook has these negative effects. However as Junco (2012) points out, to have any real-world negative effect on student's overall GPA, he or she would have to spend an enormous amount of time on Facebook. It is the real-world significance which is important in a study like this. Although there may be a statistically significant negative relationship between Facebook use (or time spent on Facebook) and academic performance, in reality, the effects are almost non-existent. Even though it is important to explore various factors potentially influencing students' academic performance and wellbeing, it is important not to overstate their real-life significance.

Thus, in the previous paragraphs we have established connections between Facebook use and the five core variables exhibited in the conceptual model. What has not been established in the previous research is the possible effect of certain Facebook variables (namely the ones allowing for greater 'surveillance') on students' Facebook use. This has not been studied due to the fact that Facebook has introduced this feature only recently. However, there is no literature focusing specifically on increased connectivity or hyperconnectivity exhibited by increased Facebook use and its effects on wellbeing and academic performance. Therefore, Facebook is just a platform chosen to show the pattern of increased connectivity among students. It is used to demonstrate a wider-spread and widely ignored pattern using a medium that is highly popular with students in a context where it is taken as 'normal' to answer to messages almost 24 hours a day.

3.3 Research Design

Qualitative research methods were chosen for this thesis since it focuses on exploring relationships between the variables presented above. As Mishler (1990) points out, ''in a broader sense, qualitative studies ultimately aim to describe and explain a pattern of relationships, which can only be done with a set of conceptually specified categories" (p. 431). The aim of this research is to see how these variables interact and to gain a deeper understanding of this relationship rather than just scrape the surface of the issue.

Regarding methodology, focus group interviews were employed as they were the best method for researching and answering the presented research question. Morgan (1996) defines focus groups as ''a research technique that collects data through group interaction on a topic determined by the researcher'' (p. 130). Focus groups are an appropriate method when a researcher wants to gain an in-depth understanding of people's opinions and behaviour as ''live encounters with groups of people will yield incremental answers to behavioural questions that go beyond the level of surface explanation'' (Stewart, Shamdasani and Rook, 2007, p. 15). Therefore, to gain in depth understanding of societal norms it is best to gain rich data that can only be obtained via qualitative methods where the researcher is directly interacting with the people representative of the sample population under study. Focus group interviews allow for such interaction where the individuals can communicate with others as well as the researcher who is then able to ask further probing questions if necessary.

Another advantage of focus groups is that they produce ''a very rich body of data expressed in the respondents' own words and context'' (Stewart et al., 2007, p. 39). Unlike surveys or other methods presenting only constrained, and usually artificial, response categories, focus groups allow the responses to be more 'natural'. Participants can express themselves in a less constrained manner and can qualify their own answers. Thus, it could be argued that the responses obtained via focus group interviews have ecological validity that could not be found in the traditional survey research. However, there is a possible downside to the richness of the data. The data gained from these interviews may sometimes be too idiosyncratic which makes them more difficult to summarise and provide generalizable results (Stewart et al., 2007).

Morgan (1996) also points out that focus groups are often used in combination with other methods, namely individual in-depth interviews and surveys. Morgan (1996) suggests that individual in-depth interviews are better suited for combination with focus group since both methods provide qualitative data. Therefore, as preliminary research, exploratory individual interviews with three university students were conducted to explore how they view their connectivity through Facebook and possible peer pressure resulting from it and if (and how) this affects their subjective wellbeing and academic performance. All three students were female master students studying business or management related master programmes and on average they were 22.3 years old. All

three students were non-Dutch, two European (German and Bulgarian) and one with a double Venezuelan-Portuguese nationality. Each interview lasted between 25 and 35 minutes. The insights gained from these interviews were analysed and used to adjust the interview guide prepared for the focus group interviews.

3.4 SAMPLE

Three focus group interviews were conducted with nineteen participants in total, ten females (average age of 23.6) and nine males (average age of 24). The interviews lasted between 55 and 75 minutes, depending on the group. All participants in this research were master students, except for two female pre-master students. This was a design of this research since master students are more likely to enter the job market and working environment in a few months than an eighteen years old first year bachelor student. Therefore, it could be argued that their future employers are more likely to be interested in the state of connectivity and wellbeing of master students than of bachelor students. Also, upon entering the workplace the level of connectivity is likely to increase for majority of the employees and therefore the suggestions for dealing with hyperconnectivity are more valuable to the master students and therefore should be tailored for their needs.

With regards to the sample and sampling method, convenience sampling was used as all participants were students at the Erasmus University Rotterdam and were reached via the author's social network, namely Facebook and friends of friends. Convenience sampling is the most commonly used sampling method for focus groups (Stewart et al., 2007) as it was easier to approach people who were familiar with the researcher and were willing to spend one or two hours of their time participating in this thesis research. The initial aim was to have equal mix of males and females in the group as well as Dutch and non-Dutch students. However, the latter was not fundamental to the research as it depended on the availability of the respondents.

Another condition was the level of participants' media usage; a mix of heavy vs. moderate to 'light' users was aimed for since the objective was to get a representative sample of the student population at the Erasmus University. Although majority of student population has smart phones, meaning mobile internet and ability to be on Facebook anytime they want, it is likely that some students use Facebook more than others. It was

preferred to have at least one person per group who does not own a smartphone since we believed it would facilitate better discussion since the students would have to present two, almost opposing, points of view and explain the differences in their behaviour. The first focus group had one female participant who did not own a smartphone, the second focus group had two female participants without smartphones and the third focus group had a male participant who owned a very old smartphone and therefore did not use it to access any online content.

Concerning the sample size, Morgan (1996) suggests that smaller groups are appropriate for discussing ''emotionally charged topics that generated high levels of participant involvement'' (p. 146) whereas larger groups ''worked better with more neutral topics that generated lower levels of involvement'' (p. 146). Stewart et al. (2007) add that smaller groups tend to be dominated by one or two individuals whereas it is harder to engage individuals in larger groups which also makes them harder to manage. Based on the exploratory interviews which revealed that people's connectivity is a rather emotionally charged topic, we opted for smaller groups of six to seven people to generate a higher level of participant involvement.

There were different male to female ratio which resulted in each interview having different group dynamic. The first group consisted of three males and three females, the second group consisted of two males and four females and the third group consisted of four males and three females. All students were master students except for two female students who are doing a pre-master programme. Three students major in law; four in finance and investments; two in media studies, three in health economics, policy and law; and the 5 students follow various business and management related master programmes. Non-Dutch students were prevalent in the groups which consisted of the following nationalities: Dutch, Indian, Czech, Romanian, Slovak, Albanian, German, Portuguese, Greek, Bulgarian, British, and Hungarian.

Before the commencement of the interviews all participants were given a short 'questionnaire' asking about their gender, age, nationality and study programme, for the purpose of allowing the author to provide certain demographic information and a consent request form informing them about the purpose of the research, the risks and benefits of their participation as well as their rights. All participants signed the form and therefore

agreed to participate in this research. They all wished to remain anonymous and therefore their names will not be published in this study.

3.5 Interview Guide

Regarding the interview guide, Stewart et al. (2007) observe two general principles that should be followed: 1) questions should be arranged from the more general to the more specific, and 2) the more relevant questions should be asked in the beginning of the interview. This means that the most general questions should be asked first or early on in the session whereas the more specific and more structured inquiries should be placed towards the end of the guide. Also, the most important questions should be ordered in the beginning of the guide, and the lesser the significance of the questions to the research purposes the lower they should be placed in the guide.

The existing research has mostly focused on data collection via surveys. Therefore, the proposed research method in this study provides a clear added value to the existing scholarship. Focus group interviews provide significantly richer data than data obtained via quantitative surveys. Surveys as such may limit participants' answers and are less appropriate for researching certain phenomenon such as possible effects of Facebook on university students' wellbeing and academic performance. However, existing research has been using several validated scales, some of which may be beneficial for this study. Therefore, based on existing scales (such as Ellisson et al., 2007; and Rosen et al., 2013), the following issues were discussed: the intensity of Facebook use, the strategy behind Facebook use, Facebook use and academic performance and self-esteem and satisfaction with life as an Erasmus University student with regards to their current level of connectivity (for the exact phrasing of the questions and the interview guide used please see Appendix 1).

1. The intensity of Facebook use
    a. The questions will regard the participants' frequency of being online and checking their Facebook (notifications and messages). The questions aim to explore whether checking and being on Facebook is a habit, whether the students are 'addicted' to it and whether it makes them anxious when they cannot check on it as often as they would like.

2. The strategy behind Facebook use
    a. The questions focus on possible strategies the students develop with regards to Facebook use such as creating 'Facebook-free' moments or not 'opening' the private messages on purpose since it is possible to see when they have read them due to the new Facebook feature. These questions also try to explore whether the students feel 'pressured' to use Facebook at all times and whether they expect others to be flexible when answering their Facebook communication. Notions of 'pressure', 'stress' and 'anxiety' are brought up to explore whether students have any negative feelings or associations when it comes to how they use Facebook and the hyperconnectivity such use may cause.
3. Facebook use and academic performance
    a. The questions under this category focus on students' use of Facebook while they are studying or preparing for their university responsibilities. They also aim at exploring students' behaviour in class when it comes to using Facebook and staying connected and whether these factors affect their concentration during classes. Based on the existing research there may be a difference between Facebook use and time spent on Facebook (Junco, 2012) and these questions are also meant to uncover whether the students themselves perceive them as one or as two different behaviours.
4. Self-esteem and satisfaction with life as an Erasmus University student
    a. This category focuses on exploring whether the participants are satisfied with their lives and whether they feel that Facebook and hyperconnectivity have any effect on their wellbeing and self-esteem. There is a strong connection between wellbeing and satisfaction with life and questions under this category seek to examine this matter when applied to the lives of students at the Erasmus University.

Certain situations were described as scenarios to help the participants imagine the situation and describe and possibly explain their behaviour. This was used especially for questions asking about their Facebook use in situations requiring their attention or social interaction such as having dinner with one or two friends or attending a pre-drinks party.

3.6 Reliability & Validity

Concerning internal validity, focus group interviews are the most appropriate method for answering the given research question since it is trying to explore a behavioural change among the population of university students, something that is best discussed in groups of like-minded individuals. Moreover, group interaction is more likely to facilitate discussion than any other method. Discussion may uncover various faces of the situation under study, some which may not have been thought of by the researcher.

With regards to external validity, the results of this qualitative study cannot be generalised to a larger population, however, they are likely to be strong indicators of what is happening with the phenomenon studied. Not all students are the same and it is possible that students of different areas such as art or medicine would have different Facebook use and connectivity concerns than management and business students who are more likely to enter fast-paced corporate life. However, it is also possible that university master students would have similar Facebook use to each other since that is the way they all keep connected.

The issue of reliability is slightly more complicated with qualitative research since it cannot be replicated in the same way as quantitative research. However, if this study was to be replicated the researcher can ask the same kind of questions as are presented in the interview guide (appendix 1). The age and ratios of male and female participants were also clearly stated which would make the replication of this study more accurate and therefore it can be argued that this study yields reliable results.

To further elaborate on the validity of focus groups research, Stewart et al. (2007) argue that there are several attributes affecting validity. Firstly, they suggest that the validity of the data gained through the focus groups are ''affected by the extent to which participants feel comfortable about openly communicating their ideas, views, or opinions'' (p. 19). They then argue that there are three categories of influences affecting participants' comfort zones. These are: intrapersonal factors and individual differences, interpersonal factors, and environmental factors.

Intrapersonal or individual differences category includes demographic, physical, and personality characteristics. Depending on the goals and objectives of the research, the researcher should carefully consider how diverse the group should be when it comes to intrapersonal and individual differences. As Stewart et al. (2007) point out, greater

heterogeneity in groups may lead to less communication between the group members and may even cause conflicts. However, as they also add, diversity tends to offer greater perspective and more innovative ideas. Therefore, to ensure the validity of this research with regards to the group dynamics, we strived to find a balance between an extremely diverse group and one that would be very similar since both of these extremes would likely result in little discussion. If the groups were too diverse, the participants might not understand each other's lifestyles and habits regarding Facebook use. On the other hand, if they were too similar they may not be aware that other students use Facebook differently and that it does not have the same effects on them in terms of their wellbeing and academic performance. To ensure the right balance and group dynamics different male-female rations were opted for as well as different ages and personalities. They all had something in common – being master students at Erasmus University and some of them even lived in the same building on campus.

Interpersonal factors refer to the "way or ways an individual views or reacts to other persons" (Shaw, 1981, p. 192 as cited in Stewart et al, 2007, p. 24). As Stewart et al. (2007) point out, it is important for the moderator to adjust the interview based on these factors by, for example, making it more or less structured. Some research suggests that it is beneficial to find out about these interpersonal traits beforehand, via a telephone interviews for example to ensure certain heterogeneity/homogeneity, depending on the goals of the research. However, other researchers argue against such actions as they believe that these factors, such as personality, values and attitudes may be hard to distinguish from other factors important for the research question. It was rather difficult to judge interpersonal factors and therefore no action was taken to find individuals' preferences as several researchers argue against such influence.

With regards to environmental factors, Stewart et al. (2007) suggest that physical settings such as the room and the positioning of the furniture should be relatively nondescript otherwise it may attract the attention of the participants who will then find it more difficult to focus on the group interview. They also recommend that although group discussion works better in smaller rooms, participants should have enough personal space to ensure that they feel comfortable with their surroundings and do not withdraw from the group. Concerning the seating arrangements, Stewart et al. (2007) advise that it is best to sit in a circle, ''or at least in a fashion where all group members can easily see one

another, facilitates discussion and reduces the tendency for particular members of the group to emerge as dominant or for subgroups to emerge'' (p. 33). To ensure environmental factors would not affect validity of this research participants were seated in a plain middle-sized room and seated in a circle, some sat on a sofa and others on chairs. In the middle there were three coffee tables with snacks and each participant was asked whether they wanted something to drink before the beginning of the interview.

The following chapter will present the results of the focus group interviews.

4. RESULTS

4.1 FACEBOOK USE AND CONNECTIVITY

Facebook was the most used social network among majority of the participants who all had profiles on this social network. One participant said that he uses WhatsApp as his primary medium to stay connected whereas for the others it was on the second place followed by e-mail and other social media such as Skype, FaceTime and Viber. Traditional calling and messaging were rarely mentioned as means of staying connected. Interestingly, all but three participants owned smartphones which resulted in a lively discussion between the owners of regular phones and owners of smartphones about the appropriateness of using one's phone in situations requiring social interaction.

When asked, majority of the participants identified their phone as the device they use the most to stay connected. People with regular phones and two people whose phones are broken in some way were the exceptions and said they use their computer the most. Three participants could not identify which device they use the most to stay connected since they constantly switch between their computers, iPads and phones and as one of them put it ''*I like gadgets, that's why I have like an iPad and iPhone and smartphone and my laptop and that's why I am always connected*''.

Since all but one of the participants use Facebook as their primary way of staying connected it was rather surprising that it was not a synonym to connectivity. However, the participants associated connectivity with using their smartphones and therefore rather than discussing their Facebook use across different devices the discussion shifted to using different applications on their phones and Facebook being the main one. Therefore, for smartphone users connectivity happened mostly via their mobile phones. One student explained that although he uses Facebook mostly on his phone he does not feel addicted: ''*I don't really feel like I am addicted. You know but I'd have to test it I guess like to get rid of my phone for 24 hours and see whether I can handle it, not sure…*''. Therefore, this suggests that smartphone users are more addicted to their phones rather than to Facebook per se.

Another student also said that she uses mostly her phone to stay connected and to check Facebook and that ''*when I am near my PC I prefer not to look on Facebook because then, you know, I cannot stop, so…. I am addicted (laughs)''.* One of the

participants said that she uses her phone to check messages but she does not reply to them since touch screen is rather uncomfortable. However, this results in her having Facebook open all the time when she is near her computer so that she can respond to people sending her messages.

None of the participants created structured Facebook-free or connectivity-free moments during the day on purpose. During one of the exploratory interviews the student said she did turn on her computer or checked her phone within the first hour of waking up. This was not the case for participants in the focus groups. Some of them expressed their desire to disconnect in the evenings, for example, as one of the students pointed out: ''*If I had a very busy day or something I say 'okay, after tonight I will not use the internet at all anymore' for example* ''. Another student said: ''*Sometimes I do it as well. I say 'okay, until 4 no Facebook' and I just go outside, chill out and forget everyone around you*.''

However, the desire to disconnect or the ability to disconnect seems to be closely related to leaving the physical space where connectivity occurs. A different student shared that he usually spends his hangover days disconnected because ''*I leave my phone and stuff in my bedroom and I just spend the entire day in the living room. So I am basically disconnected*.'' This suggests that in order to disconnect people need to remove themselves from anything that they could use to connect such as their phone, tablet or a laptop and they do this via leaving the physical space or leaving the devices out of their reach. Based on these statements it could be argued that the students are almost unable to mentally control their desire to be connected and need an additional help in terms of adjusting their physical and spatial arrangements.

Majority of the participants did not see purposefully disconnecting themselves as necessary since they argued they do it automatically or whenever they want to. One student said he keeps his phone on silent all the time, another student blocked push notifications from Facebook and WhatsApp so even if he receives a message it does not immediately pop up and as he said: ''*I see it when I see it*''. This is an indication that the participants have an agency and know they can and are able to influence their level of connectivity, at least to a certain extent. However, it is important to note this was not a common practice among the rest of the participants since most of them kept their sound and notifications on.

All of the participants admitted that life without Facebook would not be possible in the context of a university student in the Netherlands. As one of the participants put it: ''*Here in the Netherlands it (note: having a Facebook account) is necessary. We are students now and without Facebook you are nothing. You cannot talk to other people, you cannot connect with other people. When I was back in Greece I didn't use it that much and maybe if I am gonna go back I will delete my profile. But here it's necessary, you cannot live without it*.'' Similar sentiments were shared among the rest of the participants who admitted that if they did not use it for university related activities they would probably delete their accounts. Interestingly, by saying 'university related activities' the participants meant both academic and social parts of their lives. When asked whether they would delete their Facebook profiles if it was not for their assignments and projects they unanimously answered 'no' and explained that Facebook has become too much of a part of their social lives to simply delete it. Based on their statements it was clear that Facebook is of a great social value to them and that it is hard to distinguish when its academic purpose ends and social begins.

This leads us to the contrast that has emerged across the focus groups. On one hand the participants exhibited agency for disconnecting whenever they want, however, on the other hand, they all claimed they do not have a choice when it comes to having a Facebook account and checking it regularly several times a day. They said they are worried if they did not have Facebook they would be left out of all the activities taking place. One student said: ''*I would also delete it but now everybody who wants a meeting or drinks or socialise or something like that, it's on Facebook. If you don't have it then you are not gonna be there*.'' Another student said ''*If I could choose a life with or without Facebook I would choose without*'' and after agreement from few other participants she continued ''*but as we live in a world or a time or a century where everyone has Facebook then it's kind of…breaking apart*''. One of the last remarks during this discussion came from a participants who said ''*It's a social obligation to have a Facebook account*''. Therefore, the participants exercised their agency when they thought they had it but could not fight 'social obligation' to have a Facebook account otherwise they would risk being left out. One of the participants said she would not mind not having Facebook if her friends did not forget they could still reach her via traditional channels such as e-mail, calling and texting.

4.2 Addiction to Facebook

None of the participants identified themselves as hyperconnected but at least half of them said they are addicted to Facebook, and they saw it as their own fault. Not so surprisingly some of the participants, mostly female, 'admitted' to being addicted to Facebook and were rather ashamed of it. This could be due to the fact that they saw hyperconnectivity as a state where they cannot control how connected they are whereas 'addiction' refers to having a choice of being connected and realising that one is doing it too much. As one of the participants pointed out ''*we know it's bad what we are doing that we are constantly connected to the internet and Facebook. I think it's got into my head a lot, but it's a real addiction*'' and later after being told that it is not necessarily a bad thing she added ''*I know it's wrong*''.

However, existing literature has different views on Facebook 'addiction' and it is hard to determine whether participants' behaviour qualifies as such (Kuss & Griffiths, 2011). For example, Griffiths (2005) has operationally defined addictive behaviour as any behaviour that features, according to him, the six core components of addiction. These components are salience (behavioural, cognitive and emotional preoccupation with the activity), mood modification (engagement in the activity leads to favourable change in the person's emotional state), tolerance (increasing the time spent on the activity over time), withdrawal symptoms (experiencing unpleasant physical and emotional symptoms when the activity is restricted or stopped), conflict (interpersonal problems arise because of the activity) and relapse (reverting back to their old habits after an abstinence period). He argues that any behaviour exhibiting these criteria can be defined as an addiction.

Griffiths (2013) also points out that some of the existing studies assess excessive use of Facebook (or SNS) and/or people's preoccupation with it rather than addiction itself. However, this also depends on the operalisation of the concept. In his earlier study Griffiths (2012) also observed that in some of the existing literature SNS addiction has almost become a synonym to Facebook addiction although in reality these two are fundamentally different things (Griffiths, 2013). As he points out ''the real issue here concerns what people are actually addicted to and what the new Facebook addiction tools are measuring'' (2013, p. 2). Although Facebook is a SNS, it also offers many other activities to its users such as playing games, watching videos and instant messaging with friends. Therefore, simply saying that one is addicted to Facebook does not uncover the

issue since the existing scales do not differentiate whether one is addicted to constantly messaging their friends or to playing Farmville.

Van Rooij, Schoenmakers, van de Eijnden and van de Mheen (2010) share similar concern as Griffiths (2012; 2013) in terms of underdevelopment of SNS and Facebook addiction measurement scales. Their tests revealed that there is an association between social networking and compulsive internet use (or an addiction) (second strongest association after online gaming) but the results were not very informative. However, as they point out, people are unlikely to be addicted to the internet as such (as the medium) but rather to its various applications such as surfing, online gaming and chatting.

LaRose et al. (2011), provide a slightly different perspective on the issue. In their study SNS use and Facebook use seems to be one at the same thing although we have already established that this is not the case. Nevertheless, they propose an interesting argument. They suggest that ''compulsive Internet use is related to the amount of usage, however, the amount of use is not necessarily an indicator of a problem. Rather, it is the perception that the amount of use is excessive and needs to be brought under control that matters'' (n. p). As they elaborate, ''four hours of SNS use a day may not be a problem for some, while an hour a day might be a problem for others if it disrupts important life activities or binds the individual to unproductive online interactions'' (n. p.). This was clearly shown in the focus groups when one participant argued that he does not see anything wrong with being 'so' connected while another participants claimed that she knows what she is doing is wrong. As with any compulsive behaviour, the individuals may regain a momentary self-control and cut down on the amount of time they spend on Facebook. It is then possible that if they were asked about the level of their Facebook use during such period they would report lower use while still acknowledging that they are struggling with their media habits (LaRose et al, 2011).

Although problems with both Facebook and SNS addiction and compulsive use were discussed, there is still one possible addiction that needs to be addressed. This one is usually referred to as mobile phone addiction (Salehan & Negahban, 2013). Since more than half of the respondents indicated that they use mostly their mobile phones to access Facebook, it is possible that they could be experiencing a mobile phone addiction rather than self-identified Facebook addiction. Nevertheless, the data gave more of an indication of such connection rather than a strong proof of such relationship. Since distinguishing

between Facebook and mobile phone addiction was not the focus of this thesis there were no questions in place specifically targeted at this issue. However, from the group interviews it was clearly shown that the students themselves are concerned about the effects Facebook use has on them and possible addiction which makes it an interesting topic for future research.

To further elaborate on mobile phone addiction Park (2005), points out that it is usually characterised by symptoms such as feeling annoyed and uncomfortable when mobile phone is not accessible. Participants were asked whether they would leave their phone behind while they were going to run some errands and majority of them answered with a firm 'no'. When asked why they would not do that they said it would make them anxious, nervous and uncomfortable since they could not be reached in case of (hypothetical) emergency. As one of the female participants said ''*I forgot my phone at home last week when I went to work and the only thing I was actually worried about was if somebody called me or if something like happened and somebody called me that something happened. But that was the only thing I was worried about.''* However, one of the male participants pointed out that even though he also would not leave his phone behind in case there is an emergency one has, fortunately, never occurred.

On the other side of the situation was a student who said ''*whenever I am going out to party I always leave my phone at home because I always lose it. And when you are out you don't need your phone because you are already with the people you want to be with.*'' This comment raised a discussion about the importance of having one's phone with them in case there is an emergency which seemed to be the main reason people want to stay reachable. However, some students argued they would not have a problem leaving their phone behind in situations when their family and close friends know they will not be easily reachable such as when they go on vacation. Two participants illustrated this point when they said: ''*If I don't have a chance I can be perfectly without phone for two or three days and nothing happens. Because I know that if there's some emergency I will get to know, that somebody will call me*.'' And the other one added: ''*same here. If I go on a holiday I don't really check my phone that often, it's no problem to leave it somewhere*.'' Looking at the data it could be therefore argued that the participants would have no problem not using their phones while they are on vacation and would not think twice about them, however, they would still like to be reached in case of an emergency.

Therefore, it is possible that the students would be more anxious if they knew they did not have their phones with them while the someone else, possibly calling about an emergency, would expect them to be connected and reachable. This potential emergency or an urgent need for one's phone seemed to be dominant in the discussion whether the participants would or would not leave their phones behind. Although some of them acknowledged that this emergency has never happened it is the possibility of it that keeps their phones on them almost all the time. Even the ones who did not identify themselves as being addicted to Facebook or to their mobile phone admitted that they would not feel comfortable leaving their home without their phone.

Nevertheless, just because students use their mobile phones rather often it does not necessarily mean they are addicted to them although Salehan and Negahban (2013) note that majority of the studies in the field suggest that mobile phone use can indeed lead to addiction. However, according to Oulasvirta, Rattenbury, Ma, and Raita (2012), mobile devices are rather habit-forming than addictive. In their research they recognised a so called checking habit which is a habit associated with smartphone use and is exhibited by smartphone users repetitively checking the dynamic content on their phones such as WhatsApp messages or Facebook notifications and is likely to result in overall increase of mobile device usage. Based on their findings they argue that although this habitual checking is frequent, it is an annoyance rather than addiction. This was also obvious in the data gathered during the focus group interviews where the participants confirmed they check their phones not because they are waiting for something specific but rather because it is a habit.

5. DISCUSSION

5.1 RESEARCH QUESTION AND PROPOSITIONS

To answer the overarching research question '*How does university students' increased connectivity via Facebook affect their wellbeing and university performance?',* there appears to be no strong relationship between increased connectivity and overall wellbeing but there are indications of a positive relationship between increased connectivity, Facebook use and academic performance not in terms of GPA (since this was not the focus of the study) but rather in the things Facebook allows students to do (e.g. join Facebook groups meant for specific seminars, ask questions to their classmates, see what the others are doing with regards to the same problem). Rather than focusing on GPA when measuring performance this thesis focused on the process of studying, writing assignments and working on projects since there are too many factors influencing GPA or how students do on exams. Therefore, it was the process of studying or the process of academic preparation that was relevant and how hyperconnectivity via Facebook affects students' study habits and routines.

With regards to wellbeing, the students did not identify any tendencies between increased connectivity via Facebook, their self-esteem and satisfaction with life as Erasmus University students. This could be of course a limitation of this study since self-reported data are not always absolutely valid when it comes to sensitive personal questions. However, the more probable reason for this lack of relationship is that the participants did not see (hyper)connectivity as a problem or as anything worth influence. One participant even compared it to reading a newspaper in the morning in the 'old days' when there was no internet and asked whether we think it affected people's wellbeing then too. As he said, ''*it's a habit. How would you feel about reading newspaper in the morning? I make my coffee, I go to my computer, I open a news page and I open Facebook as well so I don't feel bad about it, it's just being connected*.'' This clearly indicates that the students view (hyper)connectivity and related Facebook use as nothing special, rather they perceive it as a normal part of their everyday lives.

To answer the research sub-question, ''*how does increased connectivity and expected flexibility in time and space and certain Facebook features allowing for tracking people's activity affect peer pressure to be online and how does this impact wellbeing of*

university students?, there was a certain relationship between the expected flexibility in time and space, the 'seen' Facebook feature and peer pressure to respond, however, this relationship did not extend to students' wellbeing and academic performance. This indicates that although the students feel pressure to respond to private and group messages, this pressure is not strong or significant enough to have any real-world impact on their wellbeing and academic performance. This is in accordance with Junco's (2012) findings who argued that although he found a statistically significant negative relationship between time spent on Facebook and GPA, when these results were reflected into the real world they had hardly any real impact.

Interestingly, students did not identify any social 'peer' pressure to be connected but they all said that it was necessary to have a Facebook account and be an active user if they wanted to stay in the loop of things such as social gatherings and academic work. This shows that although there is certain pressure present requiring the students to be online they did not identify it as a peer pressure. In fact, they did not identify it all suggesting, once again, that they do not see this connectivity, or in some cases hyperconnectivity, as a requirement or anything peer pressure related but rather as something normal that is to be expected when one lives in this day and age.

Concerning the proposed conceptual model and the propositions, the data does not suggest any strong relationship, rather it points towards certain tendencies between the variables. This is mostly due to the fact that the participants claimed they did not experience cycle of responsiveness which was a mediating variable in the proposed model. The results suggest that the students experience and exercise their agency and therefore are able to disconnect whenever they want, hence, they do not feel the pressure of cycle of responsiveness. Therefore, our first proposition that e*xpected flexibility in time and space will result in a cycle of responsiveness causing students to feel pressured to answer their Facebook communication* was not confirmed. This also applies to the second proposition that *hyperconnectivity will result in a cycle of responsiveness causing students to feel pressured to answer their Facebook communication*. However, with regards to Facebook seen feature it is important to note that the results indicate participants' tendency to feel certain amount of pressure to respond to messages as soon as they read them. The participants also exhibited the tendency to deal with this pressure by avoiding reading the messages until they had time to respond.

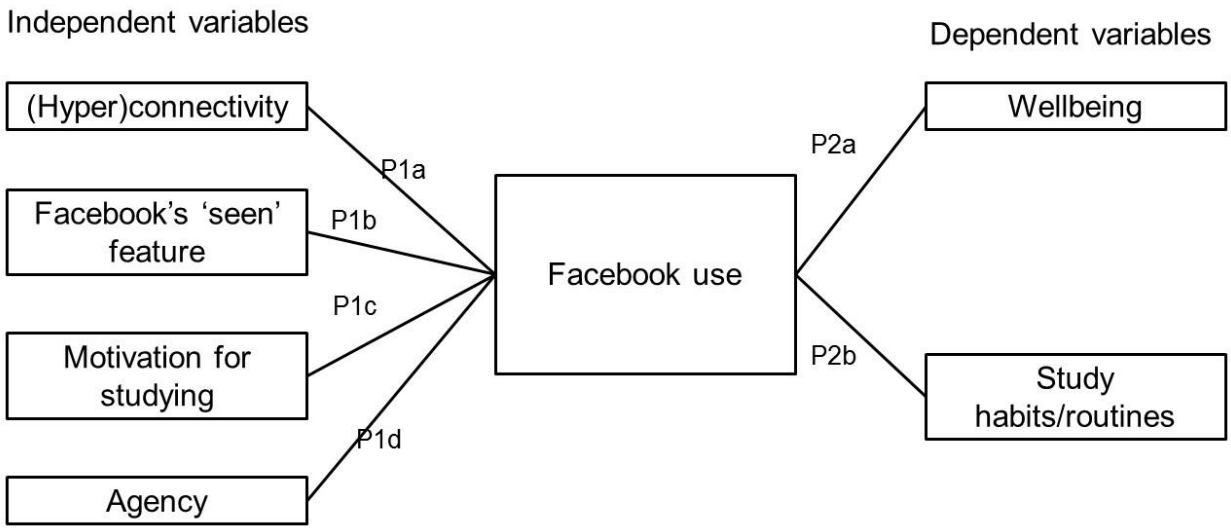
This could mean that possible pressure resulting from the 'seen' feature would be a better mediating variable than cycle of responsiveness. The fact that the concept of cycle of responsiveness comes from business context might be a reason for such outcome. There are different consequences of disconnecting or not being flexible in time and space for business professionals than for university students. In the business context the person might be perceived as less committed to their work which could result in slower promotion or even in a loss of their job. On the other hand, students do not have anything to lose besides being considered as less connected or old-fashioned and even then it is perceived rather as a choice than as an indication of their qualities and abilities.

Thus, from this point of view, there is no serious reason for students to enter cycle of responsiveness when their Facebook and other communication concerns mostly social activities. However, the information gathered during the interviews show a possible exception to this pattern which occurs when there is important school team work in question and deadline is closing in. If people are not responsive or connected in such situation the participants expressed the tendency to become frustrated and annoyed at the person who chose to be disconnected at such an important time and they would perceive the person as irresponsible and possibly refuse to work with them in the future. This suggests that some pressure exists to be connected but it only occurs in certain specific and usually predictable situations and is not constant.

Since we have established that cycle of responsiveness does not necessarily apply in the student context, it is understandable that the other two propositions suggesting that *being in a cycle of responsiveness will negatively influence student's wellbeing* and *university performance* were not supported by the collected data. Based on existing theories we assumed that compulsive Facebook use could lead to cycle of responsiveness which could in turn lead to lower wellbeing and academic performance among university students. However, it seems that introducing cycle of responsiveness into the model did not result in any stronger connection between these variables. In fact, it is possible that introducing this extra variable made the relationship weaker or even non-existent. This could be due to the fact that cycle of responsiveness is simply not applicable in our case or that the methods chosen for this research did not accommodate for reaching the full depth of data. Nevertheless, these issues will be addressed later in the limitations section.

5.2 UNEXPECTED FINDINGS

The first unexpected finding was that none of the propositions were strongly confirmed by the data. This could be demonstrative of a possibility that the initial model oversimplified the reality of (hyper)connectivity and its influence on students' wellbeing and academic performance. Hence, the model should be redefined and take into account additional variables, such as student motivation or compulsive Facebook use and further research should be done to test such adjusted model. Another possibility for this failure to support the propositions is that the suggested model took the relationships between variables and how they influence each other one step too far, or in other words, the proposed influence was too strong to be representative of the real-world situation. Below we present an adjusted conceptual model that is more representative of the current data.



In the adjusted model 'Facebook use' is placed as the mediating variable since it is more applicable to university student's life than cycle of responsiveness and is therefore more likely to contribute to their wellbeing and study habits. Academic performance was replaced by study habits/routines since academic performance as such is difficult to measure and the data suggested that Facebook use affects students' studying habits

rather than their academic performance per se. During the focus group interviews the participants admitted that connectivity via Facebook changed the way they study (e.g. they take regular breaks to check Facebook every two hours) but they did not associate it with their overall academic performance. They refused the notion that their grades would suffer from their, sometimes compulsive, Facebook use since eventually they always get the work done regardless of the process. Therefore, there is more likely to be a relationship between students' Facebook use and their studying habits than between Facebook use and overall academic performance. Thus, wellbeing and study habits/routines were used as the dependent variables in the adjusted conceptual model.

Independent variables were also changed, namely by removing expected flexibility in time and space and by adding Facebook's 'seen' feature, motivation for studying and agency. Firstly, based on the data, Facebook's seen feature has a tendency to affect students' behaviour when it comes to their Facebook use as well as to their wellbeing since students admitted to being annoyed by this feature. Secondly, motivation for studying was also a rather strong indicator of how much the participants used Facebook. If they felt motivated to study they did not use Facebook. However, when they did not want to study or felt bored during lectures they used Facebook as a distraction or as an excuse for not paying attention. Therefore, motivation for studying has a tendency to affect how students use Facebook and there is probably a strong relationship to how it influences their study habits.

Thirdly, agency refers to students' agency when they use Facebook such as deciding whether they want to respond to certain messages or not. During the interviews the participants exhibited different levels of agency, some of them said they do not care about their Facebook and WhatsApp notifications and they 'see them when they see them' while others would check any notification almost immediately even if they were doing something else at that moment such as watching a movie at home. Lastly, (hyper)connectivity remained as one of the independent variables since the data suggested a certain tendency towards a relationship between (hyper)connectivity and Facebook use meaning that there could be a connection to wellbeing and study habits. Therefore, the adjusted conceptual model suggests that (hyper)connectivity, Facebook's seen feature, motivation for studying and agency affect students' Facebook use which in turn affects their wellbeing and study habits.

With regards to the original conceptual model, the missing links between variables could be explained by the fact that two of the main concepts, expected flexibility in time and space and cycle of responsiveness, were taken out of the business context and then applied to Facebook, students' wellbeing and university performance. Based on existing research we assumed that if there is a certain relationship between Facebook use and wellbeing and Facebook use and academic performance, the same should apply when adding the other concepts. However, as was shown earlier on in this thesis, even academics in those more established areas cannot agree on the relationship between Facebook use, wellbeing and performance and therefore it is not all that surprising that our findings are inconclusive.

Similarly, according to existing research, master students are less likely to be influenced by Facebook. This could be due to their age as well as due to the possibility that they feel more secure in the university environment than first year bachelor students. This thesis focused exclusively on master students (and two pre-master students) which could explain why they did not feel that Facebook or hyperconnectivity had influenced their lives in any way worth mentioning since they are more likely to have their Facebook use 'under control'. Therefore, it is possible that if first year bachelor students were involved in the sample the results could be different. This suggests that there are possible differences in age and student status (bachelor versus master) which could lend itself as a possibility for future research.

Another rather unexpected finding was that only few students viewed their current level of connectivity as problematic whereas others perceived it as normal or disregarded the issue altogether. They described their Facebook use as more of a habit that conscious effort and that also applied to disconnecting from Facebook. They claimed that when they want to disconnect they just do it (for example by not checking Facebook or looking at their phone) but that there is no conscious decision or action behind it. This indicates that the focus on 'disconnecting on purpose' might have been misplaced since students seem to do it automatically without giving it much thought. One of the aims of this thesis was to provide suggestions on how to deal with hyperconnectivity, Facebook (peer) pressure and possible effects resulting from it. However, since the students did not identify any problems serious enough to require specialised techniques for dealing with

them, we have no suggestions to present as they seem very unnecessary. There was a consensus among students that if they experienced any unpleasant effects of Facebook use on their wellbeing or performance they knew the solution and therefore external advice would be considered as pointless and redundant. The solution they were referring to was simply not going on Facebook which they found more than feasible.

5.3 CONTRIBUTION TO THEORY

Since this thesis has attempted to make connections between theoretical concepts not researched together before, it could be argued that there is a certain, albeit not very significant, contribution to the existing theory. Unfortunately, the current theories and results concerning wellbeing and academic performance with regards to Facebook use are too different from each other to reach any kind of consensus besides the one that more research in these areas is necessary. For example, some research argues that Facebook use has positive effects in students' performance (Junco et al., 2011; Shah et al., 2012) while others argue the opposite (Jacobsen & Forste, 2011). Junco (2012) argues that although Facebook use on itself is not likely to be detrimental to performance, the time spent on Facebook is. We could partly support Junco's (2012) findings since our data showed that time spent on Facebook has a tendency to detrimentally affect students' study habits. As Kirschner and Karpinski (2011) point out, multitasking is not possible with tasks requiring processing of information such as studying and constant interruptions or switching between tasks prolongs the study process and decreases its efficiency. On the other hand, Facebook use as such is not detrimental to study processes since students can communicate and help each other via different Facebook groups. Therefore, our findings are in agreement with findings by Pasek et al. (2009) who argue that although the time students spent on SNS may detract them from studying, there is too little empirical evidence to suggest any significant negative effects on their academic performance.

With regards to wellbeing, in their study Kalpidou et al. (2011) claim that there is a strong significant relationship between Facebook variables and psychological wellbeing. For example, they found that that there was a negative relationship between spending a lot of time on Facebook and students' self-esteem. Based on our data we cannot agree with their findings. Although wellbeing is a concept mainly researched in psychology our

findings suggest that although hyperconnectivity and excessive Facebook use may have a tendency to slightly alter students' mood (such as short lasting feeling of annoyance), they are only short-term and are unlikely to contribute to any long-term or permanent effects or even damage to students' psychological wellbeing. In fact, some students admitted that Facebook increases their self-esteem by reminding their friends it is their birthday and therefore they received a lot of birthday wishes which made them feel remembered and valued. However, it is also possible that not getting enough 'likes' on their posts would, in contrast, have the tendency to lower their self-esteem although it is likely to depend on how much importance the students give to having many 'likes'.

It could also be argued that more research is necessary to determine why students spend time on Facebook. Some researchers think of Facebook use as one activity, however, as has been pointed out earlier, there is a difference between using Facebook to send instant messages to friends and playing Farmville. For example, spending a lot of time on Facebook because of posting and 'liking' updates is more likely to be connected to students' self-esteem than writing and responding to private messages or participating in university-related issues in the Facebook groups. Therefore, this study cannot confirm findings by Kalpidou et al. (2011) since we found no strong relationship between hyperconnectivity via Facebook use and wellbeing.

5.4 Contribution to practice

Although this study has not drawn any strong or generalizable results, it has provided several indications that may be useful for academic staff as well as for HR managers looking to hire recent graduates. The students did not seem to perceive heightened connectivity as a problem which suggests they might have similar attitude in the workplace resulting in them being more flexible without having a problem with it or seeing it as something negative. This means that current graduates are more used to 'multitasking' or to switching from one task to another and do not perceive it as interruptions but rather as something normal. They also seemed to respect other people's choices and argued that they would not expect people to reply to online communication in their 'personal' time such as while they were having dinner or watching a movie. This could suggest that upon entering a workplace they would be less likely to

fall into cycle of responsiveness since their expectations of others' flexibility in time and space are rather low.

With regards to suggestions for academic staff, the results indicated that students usually go on Facebook during classes when they are bored. When they perceive the class as interesting they do not have problem with not paying attention to their phone or a laptop. However, if they think they are wasting their attention listening to the lecturer, they will turn it to something more entertaining such as Facebook, WhatsApp or 9Gag. Therefore, it seems that only thing that can keep students off their phones is when the lecturer keeps the class interesting and informative so that the students feel rewarded for their attention.

5.5 Limitations and possibilities for future research

There are several limitations present in this study. First of all, the selected method provided self-reported data which are not the most objective nor the most representative of the real situation. When people self-reflect on their behaviour they are likely to alter it and it is possible that if someone else was reflecting on that same behaviour they would use different words and possible even arrive at different conclusions. This was visible during the focus group interviews on several occasions. For example, students would deny feeling any kind of social or peer pressure to be online and connected whereas they all said that they must be active on Facebook if they want to be part of the community at the Erasmus University. This suggests that there indeed is some kind of pressure although the students did not identify it and even denied its existence.

It is contradictions such as these that illustrate some of the problems with data asking for self-reflected accounts. It also suggests that trying to assess student's wellbeing by asking them about it may not be the way to gain data representative of the true relationships between the variables. Future research could try and eliminate this possible bias by introducing other methods to the mix such as participant observation or by developing more elaborate scales or questions that would get deeper into the issue. Another possibility would be to not disclose the real focus of the research and present a slightly misleading one although this could raise certain ethical issues.

Secondly, the study used convenience sampling and focused only on master students. This could be a limitation if we wanted to get a more general overview of

university population. Future research could focus on both, bachelor and master students and possibly create a comparative study focusing on finding whether there are differences between the two and what they are. Thirdly, conceptual model was oversimplified compared to how these concepts interact in reality. This is a possibility for future research that could test the adjusted model which was made to be more representative of real-world relationships.

In addition, the concepts taken from the business context were not represented in the university environment suggesting that they would need to be further adjusted to be applicable to university students. For example, there are different consequences for university students than for working professionals if they are viewed as less flexible or less connected. While students may be perceived as lazy or slow, business professionals could be viewed as less committed to their work which could results in them not getting promoted or even in them getting fired. Future research could focus on finding out in more depth why the students want to stay connected or why they view it as necessary and what kind of repercussions, if any, they identify if they were less connected.

Furthermore, during the focus group interviews it was observable that students from more collectivistic cultures such as Greek, Romanian and Portuguese had a slightly different view on Facebook and said that if it was not for Erasmus University and their life here they would strongly consider deleting Facebook since 'back home' it does not have such a prominent place in their lives. On the other hand, students from less collectivistic cultures such as British, German and Dutch did not share this view. Based on the data, one of the reasons for this could be that people from more collectivistic cultures preferred physical interaction to Facebook communication more than students from less collectivistic cultures. In practice this could be illustrated by students from more collectivistic cultures meeting up for a quick, twenty minutes long coffee to catch up rather than doing it via Facebook or WhatsApp while the students from less collectivistic cultures did not seem to have a preference. Therefore, it would be interesting to study whether people's view on (hyper)connectivity via Facebook is related to their cultural background.

Lastly, concept of addiction was discussed during the focus group interviews but since it was not the focus of this thesis it could not be explored in depth. Future research could explore the differences between so called Facebook addiction and mobile addiction

since some participants seemed to think of them as interchangeable. Sometimes they said they feel addicted to Facebook while in the next sentence they said they could not leave their phone behind because they would feel anxious which is, according to Griffiths (2005) one of the attributes of addiction. However, according to Oulasvirta et al. (2012), mobile devices are rather habit-forming than addictive which means that although students referred to their behaviour as addiction they might have meant a rather strong habit.

6. CONCLUSION

In conclusion, this thesis attempted to answer how does (hyper)connectivity influence students' wellbeing and their academic performance. Our findings suggest that there is no clear connection between these variables. There is evidence of both positive and negative tendencies of Facebook use and connectivity towards students study habits and academic preparation, however, no conclusive statements can be drawn. Students are aware of having a choice whether they want to be connected or not and they exercise their decision-making power accordingly. They are not victims of technology and connectivity as some academics would argue. They form and reform technology and their habits of using it and therefore it is rather difficult to study this issue as it is constantly changing and evolving.

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APPENDIX

APPENDIX: 1.: INTERVIEW GUIDE:

Introduction

- Myself, the topic and the purpose of the thesis.

- Is it ok if I record the interview?

- It might have to be transcribed. Your name won't be in there, confidential. No one else will have access to it.

Themes

Connectivity

- Kolb (2008): 'the mechanisms, processes, systems and relationships that link individuals and collectives by facilitating material, informational and/or social exchange. It includes geo-physical (e.g. space, time and location), technological (e.g. information technologies and their applications) as well as social interactions and artefacts''
- 3 stages: hypo-, requisite, hyper-
- Which one are you?
- How do you feel/Do you ever feel frustrated by all the connectedness? If yes, which 'medium' does it the most? (E-mail, WhatsApp, Facebook, texts, other…?)?
- What kind of phone do you have? (smartphone, do you have internet all the times)

Performance

- Does it affect your studies?
- Attention while studying
- Attention in class. Please tell me more about how you use Facebook when you are attending your classes…

The intensity of Facebook use

- How would you describe your Facebook use? What do use it for (uni, groups, instant messaging)?
- Do you go online often? How do you feel if you do not log in for a day or two?

- What do you use to go on Facebook?
- Why do you go on Facebook (so 'frequently'/sporadically)?
- Do you ever leave your phone behind? Why? Do you mind?
- Please tell me more about how you use Facebook when you are hanging out with friends.
    - Do you even check your phone? Or only when a notification rings?
- Would you say that Facebook has become part of your everyday activity/daily routine? Why yes/no?
    - When is the first time you 'connect' (check Facebook) and the last time you 'disconnect'?
- Do you purposefully create Facebook-free moments during your day?
    - Why is that the case?
- **SEEN FEATURE:** How do you feel about the Facebook feature allowing your friends to see when you have read their messages?
    - Do you ever feel pressured to respond?
    - Have you changed your behaviour because of it? Not read some messages, ignore people….
    - How do you feel in the situation is reversed? And you know someone read the message but hasn't responded (about a dinner)? Does it frustrate you?
        - Would you call them to 'check' or call them out on it?
        - Has somebody ever done it to you?

- Would you say that having dinner or going to the movies is 'good enough' excuse to disconnect and not respond?
- How do you feel if someone else isn't responding (connected/ flexible enough in time and space as much as you'd like him/expect him to be?
- Have you ever experienced a situation in which....Do you know someone who disconnects and then you cannot reach them? How do you feel about that?

<u>Self-esteem and satisfaction with life as an Erasmus University student</u>

- On the whole, how do you feel about yourself?

- Are you satisfied? Would you like to change something about yourself?
- How do you feel about your life as an Erasmus student?
- Would you say that Facebook and your connectivity influence your wellbeing?
    - If yes, how?
    - Would you change anything about it?