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Facebook, Perceived Loneliness and Social Capital

The effect of Facebook use on levels of perceived loneliness of Facebook users and the influence of social capital

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Executive Summary

This thesis focuses on the relationship between the intensity of Facebook usage and levels of perceived loneliness of Facebook users and to what extent social capital acquired through Facebook influences this relationship. Social network sites like Facebook have become more and more popular through the last decade and research on this subject is relatively new. Little is known about the effects of social network sites, like Facebook, on people's social life. This research aimed to illuminate a part of this new entity by analysing existing literature and by distributing a survey amongst Facebook users to collect data on the intensity of Facebook use, feelings of loneliness and the acquisition of social capital through Facebook. With this, this research aims at contributing to the scientific knowledge on Facebook and its relationship with loneliness and social capital. Finally the insights derived from this research can raise awareness for future research and interventions on the role of Facebook on people's perceived loneliness and the chances that Facebook provides for the acquisition of social capital.

An analysis of existing literature on Facebook, loneliness and social capital and relationships between these concepts is created that show different insights into this subject. The online survey is created by using standardized and validated questionnaires and by adding additional questions on social capital acquired on Facebook. The ULCA Loneliness Scale was used to measure perceived loneliness and the A-SCAT model was used as a basis for the measurement of social capital acquired through Facebook. The survey was peer reviewed with the help of a pilot study before the survey was distributed on Facebook. Eventually data was gathered of 229 respondents that were included in the data analysis. With the use of correlation, regression and moderator analyses data were analysed.

This research indicates that the intensity of Facebook use does not have a relationship with levels of perceived loneliness of Facebook users, and social capital acquired through Facebook does not have an influence on the relationship. Furthermore this research indicates that increased Facebook use leads to an increased acquisition of social capital through Facebook. Finally indications have been found on that Facebook users with more intense feelings of loneliness acquire more social capital through Facebook.

Keywords: Facebook, perceived loneliness, social capital

Preface

In September 2014 I started thinking about a subject for my master thesis. I knew right away I wanted to investigate something that included social capital since I was very interested in this topic. The fact that resources can be acquired through a social network that could benefit you interested me since this could be anything. It is such a broad and hard to grasp but nevertheless interesting concept that piqued my curiosity. My interest on this topic started when Hester Moerbeek lectured about social capital in the course Comparative Sociological Analysis of Health Problems and Policies in the first year of my master. I knew then I had to contact her to be my supervisor during the master thesis process.

Then I had to find something to link social capital to, and came up with Facebook. Something I check every day. Since social capital is acquired through a social network, what does this mean for an online social network I thought. People around me check Facebook every day as well. Some more than others. There are some you see online all the time and there are some that only seem to have created a Facebook-account to never look at it again. It made me wonder who of the two was happier. Who of the two was more satisfied with life. What impact Facebook use has on people's lives. Do active Facebook users really have such a happy and exiting life as the portray it to be or is this just to cover up and compensate for an emptiness they feel in real life? Do they feel lonelier than non-active Facebook users? And what role does social capital play? Does the amount of social capital Facebook users acquire through using Facebook influence someone's satisfaction with life and their sense of belonging? Does the amount of social capital Facebook users acquire influence feelings of loneliness? These were all questions I liked to incorporate in my thesis and have led to the subject being discussed in this thesis.

I would like to thank a few people that supported me throughout the master thesis process. First of all I want to thank my family, friends and classmates for their support and help with the pilot study. Especially Marlies Casteleijn for her genuine interest in my research and her offered feedback, and Marit Imminkhuizen for being my co-referent. Finally my special thanks go out to my supervisors, Hester Moerbeek and Kirsten Verkooijen. You have both taught me a lot. Thank you Kirsten, my second supervisor, for your in depth feedback. Especially on the statistical part of this thesis which I found most difficult. And thank you

Hester, my first supervisor, for supporting me on all aspects of the master thesis throughout the entire process. You helped me find my way when I could not do so myself. Your professional but informal supervision and down to earth attitude are things I like and therefore I am glad to have been supervised by you.

Yours sincerely,

Nick van den Tempel

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1. Introduction

1.1 This chapter

This master thesis examines the relationship between the amount of Facebook use and perceived loneliness of Facebook users, and the influence of social capital acquired through Facebook on this relationship. This relationship is investigated by conducting a literature study and creating an online survey that is distributed among Facebook users.

In this chapter an introduction will be given to the subject of this thesis, followed by the knowledge gap that will be addressed in this research. At the end of the introduction the aim and the relevance of this research will be presented, followed by the research questions.

1.2 The evolution of social networks

Before the rise of social media, or even before there was internet or telephone, building and maintaining social networks looked a lot different than it does today. Communication was restricted to face-to-face contact or sending letters to each other. Most of people's social network involved people from their community that lived nearby or whom they worked with (Aarts, 2011). Social networks were relatively small in size and involved people one had frequent contact with. Keeping contact with people over long distances was difficult and took a lot of time and effort. With the introduction of inventions like the telegraph and later the telephone people could contact each other more easily, more frequently and from larger distances. A larger social network could now be built and maintained (Aarts, 2011). The rise of internet facilitated this even more. People could now send each other e-mails which had a low threshold and only required an internet connection. People were enabled to come in contact, or keep in contact, with people all around the world with minimum effort. When smart phones and social media were introduced it even gave a whole other dimension to building and maintaining social networks. Social networks could now be maintained anywhere, at any time, as frequent as someone likes, with anyone all over the world, with just the click of a few buttons. Internet and social media have nowadays become so integrated into society that they have become part of our everyday life (Baym et al., 2007; Mesch & Talmud, 2006).

1.3 Facebook

The rise of internet and social media made it possible to create and maintain social networks online. Several social network sites have been introduced since the late 90's. One of these sites and nowadays the biggest and most popular social network site is Facebook. Originally founded in 2004 by and for college students in the US, it has grown to having over 1,2 billion active users worldwide in 2013 (The Guardian, 2014). To illustrate its rapid growth; only 5 years earlier this group was 8,5 times smaller (145 million) and 2 years before that about a hundred times smaller (12 million). Facebook enables people to present themselves online by sharing personal information and interests and interact with other people by chatting, posting texts, pictures, links or video's, commenting on each other's posts, broadcasting news and even through playing games. People can use Facebook to either maintain existing relationships or to create new ones. By doing so, network ties are maintained and new ones are created. For example by posting photos and videos Facebook provides people with a fundamental way to keep contacts posted. This is a very effective way to keep in contact with people and to share everything you experience and what is on your mind. Also companies and organizations take advantage of Facebook for advertisement, to easily reach a large audience and to interact with customers. Having a Facebook directory has become nearly unavoidable to stay in the picture and compete with other companies and organizations (Ellison et al., 2007).

The use of social network sites like Facebook has even led to new terminology like for example 'online friendships'. The word 'online' opposes 'in real life' which is also a new kind of terminology. Before the rise of internet and social network sites like Facebook there was no distinction between 'online' and 'real life'. There was no digital world which could be used to keep in contact with friends. This could only be done through face-to-face contact and through media like letters and telephones. Now, looking at this new kind of terminology, a clear distinction is made between the online world and the real world (Antheunis et al., 2012). Friendships can now either be 'offline' (which is another kind of new terminology) 'online' or a mix of both. Nowadays it is uncommon that there is no technology involved in communication between friends. Mobile phones and social media have become additional ways of communication (Antheunis et al., 2012). This new kind of terminology indicates how big the impact is of the rise of internet and social media on society and people's lives and how people interact with each other. A groundbreaking new way of communication is created and this gives a whole new dimension to how people create or maintain friendships.

1.4 Knowledge gap

Despite of all the advantages of social network sites like Facebook for communication and interaction between people there might also be some questionable aspects and possible downsides to it. It is possible that the more time people spent on social network sites and use them as a tool for communication the less they will interact with each other offline and face-to-face. Interactions on social network sites are not between two human beings being physically in each other's presence but they are on a computer screen. Is this still satisfactory? Does this still give us a sense of belonging and togetherness? Is it not that interaction with someone is much more satisfying when all senses are stimulated, when you can see, touch, hear, smell and in some cases also taste (in for example intimate relationships) someone? Is it not that spending more time behind your computer screen on social network sites create loneliness since you are not surrounded by people? Or maybe the opposite is true that communication and interactions through social network sites combat loneliness because it enables people to be in contact and interact with so many other people with minimum effort?

And what about social capital (for a clear description of social capital see Chapter 2)? To what extent does social capital influence loneliness? More specifically, to what extent is the amount of social capital someone acquires influenced by loneliness? One could argue that people who spend more time on social network sites have a larger social network since more time is invested in building and maintaining a social network. One can contact hundreds of people in minutes while in real life this would take days, if not weeks. A larger social network means more possibilities for achieving social capital (Bourdieu, 1984). Since social capital includes things like information, support and love from others (Lin, 2001) it could mean that the more social capital one acquires the more support and love one receives and the less lonely someone feels. But are support and loving words acquired through a social network site on a computer screen just as valuable as a loving arm around you?

Even though there is research conducted on relationships between social capital and loneliness, and social capital and Facebook (as will be presented in Chapter 4), there is little to no research that combined Facebook with loneliness, let alone that combined Facebook, loneliness and social capital. More specifically, there is no research conducted that specifically looked at the relationship between the amount of Facebook use and the level of perceived loneliness of its users and to what extent social capital acquired through Facebook influences this relationship. Research on Facebook is limited since it is a relatively new entity.

Little research is done on the impact that social network sites like Facebook have on people's lives. Up until now most research on Facebook and social media focused on social identity but less on health related topics. Does Facebook use affect people's feelings of loneliness? Do people who use Facebook more frequently than others feel more lonely than people who use Facebook less than others or not? And to what extent does social capital influence this relationship? A lot of uncertainty about this remains.

1.5 Aim and relevance of this research

The aim of this research, is to gain more insight into the relationship between Facebook, loneliness and social capital. More specifically, to get more insight into the relationship between the amount of Facebook use and the level of perceived loneliness of its users and to what extent social capital acquired through Facebook influences this relationship. With this information, we can understand more about the consequences of this new dimension of communication and interaction that Facebook provides and its effect on the perceived loneliness of its users. Ultimately this insight could raise awareness on the importance of social media and social capital on feelings of loneliness and help future programs and interventions that focus on loneliness to consider the importance of social media and social capital when looking at loneliness. It could encourage to use and take advantage of Facebook to combat loneliness or on the other hand to combat possible negative consequences of Facebook use that create loneliness. It will give us more insight in the importance of having social capital as a barrier to loneliness, or the consequences of having little social capital for loneliness.

1.6 Research questions

In this thesis two research question will be answered:

1. Is there a relationship between the amount of Facebook use and the level of perceived loneliness of Facebook users?
2. To what extent does the amount of social capital acquired through Facebook influence the relationship between the level of perceived loneliness of Facebook users and the amount of Facebook use?

The first research question aims at getting insight into the relationship between the amount of Facebook use and the level of perceived loneliness of Facebook users. The second research question aims at getting insight into what extent the relationship investigated in the first

research question is influenced by social capital acquired through Facebook. To answer the research questions a literature study is conducted to analyse what is already known about the subject and an online survey is created to measure the intensity of Facebook use, perceived loneliness and amounts of social capital acquired through Facebook of Facebook users.

1.7 Outline of this thesis

In the next chapter a theoretical framework will be presented that is important to understand the general concepts of this thesis. In Chapter 3 the methodology used for data collection are presented. It includes how the literature study is conducted and how data collection using the online survey is done, plus the data analysis is presented and some ethical considerations are discussed. In Chapter 4 the results of the literature study are presented in which an analysis of existing research on what is already known about the subject is conducted. In Chapter 5 the results of the online survey are presented. In Chapter 6, the research will be discussed and evaluated. The results of the literature study and the survey will be interpreted, methodological considerations will be discussed, the relevance of this research will be discussed and recommendations will be given for further research. In the final chapter, Chapter 7, answers will be given to the research questions.

2. Theoretical framework

2.1 This chapter

In this chapter a theoretical framework will be presented on general concepts that are discussed throughout the thesis and need some explanation to be understood clearly. Starting with an explanation of social networks, followed by an explanation of social capital.

2.2 Social networks

A social network is the structure and the core element of social capital. Through a social network social capital can be acquired (Ferlander, 2007). To be able to understand social capital, which is an important concept in this thesis, social networks will first be elaborated on since this is an important part and the core element of social capital. A social network is a network of social relationships a person has. Simply said it involves the people someone knows and who know them. The quality of a social network depends on several factors, namely the size of a social network, the nature of ties (e.g. family ties, friends or acquaintances), strength of ties (for example one does not necessarily have to have a strong relationship with family but could have a strong relationship with friends), range (vertical relations e.g. people from different hierarchal positions), density (people in someone's social network know each other) and frequency of contact (Ferlander, 2007).

Different kinds of network ties can be distinguished, namely bonding, bridging and linking ties. In addition, these network ties can be either weak or strong ones, depending on the intensity and closeness of the ties. Bonding and bridging ties are horizontal ties. Meaning they are ties with people with similar hierarchal positions (Putnam, 2000). Differences in hierarchal positions are often related to differences in aspects like income level, educational level or occupational level but can also be related to aspects that do not relate to wealth or power like levels of support acquired through network ties. Bonding ties are ties with people that have similar social characteristics like age, sex, educational level etc. It are ties between people that can relate to each other. Binding ties are ties with people that have other social characteristics. Linking ties are ties with people from different hierarchal positions (Putnam, 2000; Woolcook, 1998).

2.3 Social capital

Social capital are resources that are not directly accessible to people but are acquired through other people. This can be material resources like borrowing a car or non-material resources like receiving information or support (Lin, 2001). Social capital often comes forth out of trust, norms and reciprocity (Putnam, 2000). Social capital is such a broad concept that it is often hard to say what is not social capital because such a large variety of material and non-material resources can be acquired through other people. Over the past decades quite some research and theories have been developed on social capital. Although the concept of social capital was used earlier, Pierre Bourdieu was one of the first sociologists to clearly define social capital. He defined social capital as “the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalized relationships of mutual acquaintance or recognition” (Bourdieu, 1986, p.248). Another definition of social capital, which is shorter and perhaps easier to understand, is that of Nan Lin who defines it as “resources embedded in a social structure that are accessed and/or mobilized in purposive action” (Lin, 2001, p.29). Three components of social capital come forward in this definition. Resources, embeddedness in social structures (e.g. social networks) and that it is acquired through purposive action.

Although social capital is for the most part considered to be a positive thing to have, not all social capital is necessarily positive or beneficial to someone. Moerbeek (2001) explains this by making a distinction between positive and beneficial social capital that she refers to as ‘sweet social capital’ and negative or non-beneficial social capital that she refers to as ‘sour social capital’. An example of sweet social capital is receiving support from a partner or family member. An example of negative or sour social capital is when people talk badly about other people in a company which could negatively influence the reputation of the person being talked about. This could eventually obstruct the person being talked bad about from getting a promotion or another job. Putnam (1993) and Szreter and Woolcook (2004) add to this that linking social capital can be used in a negative way in forms of nepotism, corruption and suppression.

Different theories have been developed by different scholars on social capital. Lin (2001) for example makes a distinction between personal and social resources to clarify what is social capital and what is not. Social resources, which are considered to be social capital, are resources that are not directly available to an individual person. Unlike personal resources

which are in the possession of individuals and do not require other people to access them. Both personal and social resources may include material and symbolic goods. Material goods like cars, money or anything else materialistic and symbolic goods like memberships, reputation, fame etc. Besides, Lin states that social resources are far more useful and of more value than personal resources. One major reason for this is that personal resources are often limited to an individual while a great amount of social resources can be acquired through social ties.

Bourdieu (1986) mainly focused on how individuals can benefit from having social contacts. He states that social capital results from being a member of a group. The bigger the social network and the more resources people in one's social network have, the more social capital someone can acquire. Unlike Bourdieu, Putnam (2000) focused mainly on the impact of social capital for the collective. Social capital is owned by a community and revolves around trust, norms and reciprocity. The better these three aspects the more social capital can be shared. In order to achieve this, participation in communities and making ties is important. This facilitates social capital. Coleman (1990) states that social capital contains two elements. Social capital is an aspect of a social structure and it is a facilitator for actions of individuals within the structure (p.301). People have interest in events and their outcomes to serve their needs and therefore people participate in events to control it in order for them to benefit from the outcome. People engage in exchanges of resources to gain from it. This facilitates the actions of individuals and this forms the foundation for the acquisition of social capital.

Different scholars focused on different aspects of social capital. In this research, there is a focus on social capital that is acquired through Facebook. In other words, social capital that is acquired through the network ties of the online social network that Facebook is. The focus is on the influence of social capital on the individual, not the collective, and how it influences the relationship between the amount of the amount of hours spent on Facebook and levels of perceived loneliness of Facebook users.

In the following chapter methods will be described that are used for data collection throughout the research.

3. Methods of data collection

3.1 This chapter

In this chapter the methods that are used for data collection are presented. Starting with a description of how data is collection in the literature study, followed by how the online survey is created, how it was used to collected data and the measures used in the survey. Finally the data analysis of the data derived from the survey will be presented and some ethical considerations will be discussed.

3.2 Data collection literature study

In the early part of the research, a literature study was conducted to analyse what is already known about the subject of this thesis. These results are presented in Chapter 4. Databases Google Scholar and Web of Science were used to search for scientific articles. These databases were accessed through the digital library of Wageningen University.

Several search terms were used to find articles that relate the subject being discussed in this thesis. The main search terms were Facebook, loneliness and social capital. These search terms were combined into Facebook and loneliness, loneliness and social capital, and Facebook and social capital. A large part of the literature used in this thesis was found by entering these combinations of search terms. A combination of Facebook, loneliness and social capital was also used but this resulted in a limited amount of usable literature. Social capital was the only search term that was used on its own to get more insight into social capital and to be able to describe social capital as is presented in the theoretical framework in Chapter 2. All search terms were in English. No other languages were used to search for usable literature and used literature was written in no other language than English.

At first the titles of literature were scanned after entering the search terms. If the titles of the articles looked relevant and useful for this research the abstracts were read. The abstract were then evaluated to see whether the articles would be included in the thesis or not. If the articles looked relevant and useful after reading the abstracts the article was read and scanned for usable information. In order to easily consult usable articles throughout the writing process of the thesis small summaries were made of articles that were read. Those summaries were put in an overview so relevant articles could be consulted in a quick and easy way. Most of the other

literature used in this thesis were found via references in the literature that was found earlier. When authors referred to interesting and useful findings, the original articles were consulted. Eventually 49 articles were consulted in the literature study that could be used to answer the research questions in this thesis.

This research focused on Facebook only and not on other social network sites like Twitter or LinkedIn. The reason for this is that Facebook is the largest and most popular social network site on the internet and it offers the most diverse options for communication and interaction. People can chat with each other, post and reply to messages more extensively than is possible on other social network sites. There are also a lot of group pages on Facebook for people that share common interests. Besides this a lot of personal information and interests are shared. Twitter is more focused on following what people do rather than interacting with each other or to build or maintain a social network and LinkedIn is created mainly for occupational purposes.

3.3 Data collection survey

In order to answer the research questions a survey was developed using Qualtrics, which is a provider of online survey software, to gather data on the intensity of Facebook use of Facebook users, levels of perceived loneliness of Facebook users and the amounts of social capital that are acquired through Facebook by Facebook users.

Before the survey was distributed a pilot study was conducted to remove possible flaws and to enhance the overall quality of the survey. The survey was sent to 13 people with the question to critically check the survey and give feedback on flaws and things that were not clear to them. This was done by people with different educational levels so that it would be clear to everyone (what a university student takes for granted does not necessarily have to be clear to someone with basic education). Some of the 13 people were asked to just fill in the survey like they normally would without being critical and then give feedback. This was useful since eventually the people that would fill in the survey would most likely fill in the survey the same way, without being overly critical. All feedback was used to edit and enhance the quality of the survey until no flaws were spotted anymore.

After the pilot study, the survey was distributed on Facebook through my own list of friends. At first by posting the link to the survey on the homepage of Facebook and secondly by

sending personal messages to all contact with the question to fill in and share the survey in order to reach a wider audience. This to increase chances of finding people willing to fill in the survey. In a period of two days every 589 contacts in my friend list were approached. After this it depended on the willingness of the potential respondents whether the survey would be filled in and/or shared. The data collection period lasted about three weeks, in December 2014 and January 2015, in which 254 people filled in the survey (the entire research period lasted from September 2014 to March 2015. This includes writing the research proposal, data collection, data analysis and the final thesis writing). Of these responses 25 were not usable due to missing data which led to a dropout rate of 9,9%. Eventually 229 usable responses remained that were used in the data analysis.

The inclusion criteria for the target population of this research were that respondents had to be Facebook users. This could be Facebook users of any age or nationality, active users or less active users, as long as they had a Facebook account. In order to reach the target population the link to the survey was distributed through Facebook. In this way the target population was directly reached because one had to have a Facebook account to be able to fill in the survey. Because of this there is little chance for selection bias. However nonresponse bias and voluntary response bias is possible since the respondents are most likely the ones that are most interested in filling out the survey and/or are most active on Facebook. Nevertheless this will still give insight into the subject being investigated.

3.4 Measures survey

The survey consisted of four parts which altogether took about 5 to 10 minutes to fill in. The first part consisted of a few general questions about demographical characteristics like sex, age, educational level, whether respondents live alone or not and what the respondents occupational conditions are. For this part standardized questions from a questionnaire created by the University of Gent that measures social capital were used (Vyncke, 2008). In the second part respondents had to fill in the average amount of time they spend on Facebook per week. This to gather data on the intensity of Facebook use of the research sample.

In the third part perceived loneliness was measured. This was measured using the UCLA Loneliness Scale which is a standardized measurement tool for perceived loneliness created by the University of California (Russell, et al. 1978). The tool has a Cronbach's alpha of 0.911, which makes it a highly consistent and reliable measurement tool. The loneliness scale

consists of 20 statements and four answering options that are linked to feelings of loneliness. Respondents had to indicate to what extent each of the 20 statements applied to them by indicating if the statement often, sometimes, rarely or never applied to them. To calculate a score, often was valued as 3, sometimes as 2, rarely as 1 and never as 0. With this, an average score for each statement was calculated ranging from 0 to 3. By adding up the scores for all statements the respondents could score from 0 (lowest level of perceived loneliness) to 60 (highest level of perceived loneliness). Since the research population consisted almost entirely of Dutch people the statement and answering options were translated into Dutch (See Appendix, figure 3).

In the fourth and last part of the survey social capital acquired through Facebook was measured. This is measured using the Adapted Social Capital Assessment Tool (A-SCAT) which is a measurement tool for social capital (Harpham et al. 2002). The reason that this tool is used and not the social capital measurement tool from the University of Gent as mentioned earlier is that the latter was much too long which could possibly discourage potential respondents to fill in the survey. The A-SCAT is not a tool that could be used straight away in the survey. It consists of 18 components of social capital, 7 structural and 11 cognitive ones, that are used to create a list of statements to measure social capital acquired through Facebook. In other words, each statement used in the survey was based on one component of social capital from the A-SCAT. Three of the 18 components are not included in the survey, namely social harmony, links to groups with resources and frequency of general collective action. Social harmony and links to group with resources are left out because they are irrelevant or could hardly be linked to social capital acquired through Facebook. Frequency of general collective action is left out because it overlapped with specific collective action. To make the survey coherent this part was created in the same way as was done in the part that measured perceived loneliness. A list of statements is created with 4 answering options ranging from 'often' to 'never' in which the respondent had to indicate to what extent each statement applied to them. With this an average social capital score could be calculated, also ranging from 0 to 3. By adding up the scores of the statements a final score was calculated that ranged from 0 (no social capital acquired through Facebook) to 45 (highest amount of social capital acquired through Facebook). The created list of statements that measured social capital had a Cronbach's alpha of 0.874, which makes it a highly consistent and reliable tool. Like the rest of the survey the statements and answers of this part were translated into Dutch. To increase the validity of the survey the statements are clearly described and are non-leading, meaning

that statements are not formulated in such a way that it makes a respondent automatically prefer one answer over another (See Appendix, figure 4). After data collection these four parts provided data that could be used to find relationships between the amount of Facebook use and perceived loneliness of Facebook users, and to what extent social capital influences this relationship.

3.5 Data analysis survey

In Qualtrics all the statistics of the responses on each of the questions in the survey were gathered in an overview. Of all questions an initial report was automatically made by the program that showed that frequency of particular answers being given by the respondents in a graphical form. In this way the characteristics of the research sample, data on the average amount of hours spend on Facebook per week, the perceived loneliness scores and the social capital scores were mapped. In order to be able to analyse the relationship between the average amount of Facebook use per week of the respondents, the level of perceived loneliness and to what extent social capital acquired through Facebook influences this relationship, the levels of perceived loneliness and amounts of social capital acquired through Facebook had to be calculated for each respondent. The data of all respondents were mapped in SPSS with all the demographical characteristics, hours on Facebook, the perceived loneliness scores and the social capital scores linked to each respondent. In this way the amount of hours spend on Facebook could be linked to a perceived loneliness score and a social capital acquired through Facebook score.

SPSS only works with numbers and therefore characteristics like educational level, living conditions and occupational situations were coded. After all data were entered statistical analyses were performed. First correlation analyses were conducted. This to find out whether there are relationship between the variables in this research (hours on Facebook, level of perceived loneliness, amount of social capital acquired through Facebook, sex, age, educational level and living conditions). A special focus was on hours on Facebook, perceived loneliness scores and social capital scores since relationships between these variables help answer the research questions. For these variable a regression analysis is conducted to test the significance of the relationships. Variable occupational situation was not incorporated in the data analysis since no logical numeric scale could be created out of the answers. After this, a moderator analysis was conducted to find out to what extent the amount of social capital acquired through Facebook influences the relationship between the amount of hours spent on

Facebook and the level of perceived loneliness of Facebook users. The results of these tests and further explanation of what exactly is tested are presented in Chapter 5.

3.6 Ethical considerations

The data collected from the online survey is completely anonymous and confidential and will only be used for research purposes. Even though someone's amount of social capital acquired through Facebook might not be privacy-sensitive information, someone's level of perceived loneliness could well be privacy-sensitive information that respondents would not like anyone else to know. In Qualtrics only the IP-addresses are shown of each respondent. Respondents were not asked to fill in names or other private information. Because the link was posted on Facebook for all Facebook contacts to see and links were sent in personal messages quickly to all contacts one after another it was impossible to keep track of who filled in the survey when, which made it impossible to link IP-addresses to a specific person. In the pilot study however (N = 13) known persons were asked to fill in the survey and give feedback on the survey at specific points in time. This means that in the pilot study the IP-addresses could be linked to specific persons if it was known in what order respondents filled in the survey. Therefore those who participated in the pilot study were asked beforehand if they agreed with their response not being anonymous. To limit response bias and to safeguard the validity of the research the participants were asked to fill in the survey as genuinely as possible. What parts of the survey were privacy-sensitive were not mentioned so the respondents would not focus on giving social desirable answers on these parts.

4. Results literature study

4.1 This chapter

In this chapter the results of the literature study are presented. An analysis of existing literature is conducted to create an overview of what is already known about the subject being discussed in this thesis.

The chapter starts by briefly looking at literature that linked social capital, health and loneliness. After this, literature is discussed that linked Facebook to social capital. Finally literature is discussed that link Facebook to loneliness.

4.2 Social capital, health and loneliness

Research has been conducted on the influence of social capital on health and loneliness. It shows that social capital has a positive effect on health and that social capital in the form of support has a direct influence on someone's health (Kawachi et al., 1997).

Kawachi and colleagues (1997) found a positive relationship between the amount of collective social capital and the average level of health. e.g. Aldemon (2005) found that community social capital (social capital in communities that people live in) and the presence of family was beneficial for health, well-being and sense of belonging of and the development of children. Morgan and colleagues (2007) add to this that there is a positive relationship between community social capital and the psychological well-being of youth thanks to a sense of belonging. Ferlander (2007) found a positive relationship between social capital and perceived health, and found that social capital serves as an intermediate variable in that states in the US with less trust and participation of people in communities reported higher death rates.

Social isolation and loneliness due to a lack of support is highly correlated with bad health conditions and poor well-being (Kawachi et al., 1997). Social isolation and a lack of social support can lead to serious health issues like increased risks of cancer, respiratory- and cardiovascular diseases and premature mortality. Research has even shown that social support increases the survival chances of infarcts, speeds up the recovery of haemorrhages and forms a barrier against psychosocial stress (Berkman & Glass, 2000). Putnam (2000) argues that nowadays increasing working times, labour mobility, urban sprawl, commuting and the

increasing social poverty of peoples environment can lead to people pursuing social isolation. Having a social network, through which social capital can be acquired, can positively influence cognitive and emotional well-being by giving meaning to someone's life (House, et al., 1988). Being active in a social network has a significant positive effect on feelings of happiness (Bruni & Stanca, 2008), mental and physical health (Ferlander, 2007) and even on income levels (Robinson et al. 2011). It can be concluded that existing literature shows that social capital is beneficial for health and well-being.

4.3 Facebook and social capital

Research on Facebook and social capital is relatively limited. One of very few researches that combined Facebook with social capital, but still leaves out health and loneliness, is that of Ellison and colleagues (2007). In this research there is specifically looked at Facebook and the benefits of having 'friends' on Facebook. There is a distinction made between bonding social capital (e.g. 'weak ties') which are weak connections with people that could provide useful information but not emotional support, bonding social capital from close friends and family and Ellison and colleagues add a new concept which is 'maintained social capital'. This new concept involves social capital from network ties with people after being physically separated from each other (like with migrations). The main findings of this research are; (1) that Facebook users mainly maintain offline relationships rather than create new ones; (2) contact on Facebook is no substitute for offline contact but it is additional; (3) Facebook makes it easier to convert 'latent ties' (ties that involve no contact but have the potential to become a connection) to weak ties. This because people are easily found and contact is easily made. Also contacts that are otherwise short-lived can now crystallize into stronger relationships; (4) Students who use Facebook more intensely reported having more bridging social capital and better self-esteem than students who use Facebook less intensively, and (5) Facebook is more useful for creating and maintaining bridging social capital than bonding social capital.

Another research that looked at the relationship between Facebook and social capital is that of Sabatini and Sarracino (2014). In this research there is a focus on the shift from social participation to online social participation and what effect this has on trust and sociability. The main goal was to investigate if online networking supports or destroys social capital. Like the research from that of Ellison and colleagues (2007) they find that Facebook use has a positive effect on face-to-face interactions and online contact is not a substitute for offline contact. This is in contrast to researches from the early 00's when social media and online

social networking was uprising. Researchers at that time claimed that more time on the internet simply led to less time being investigated in ties with family, friends, neighbours and acquaintances in real life which would lead to less social capital and more social isolation (Putnam, 2000; Bartolini & Bonatti, 2003; Nie et al., 2002). This was not the only concern. Even today there are worries about risky behaviours (like online harassment or internet-initiated sex crimes), internet addiction, cyberbullying and unsafe disclosure of information that come along with social network sites like Facebook (Valenzuela et al., 2008). Finally Sabatini and Sarracino (2014) claim that a downside to more online contact is that it leads to less social trust.

Nowadays researchers claim that connectedness in social network sites like Facebook entail engagement in social interactions and help to accumulate and maintain the acquisition of social capital (Sabatini & Sarracino, 2014). Bauernschuster and colleagues (2011) even claim that having internet and access to social network sites increases chances of children participating in social activities such as doing sports or joining other kinds of youth clubs. Pénard and Poussing (2011) even go a step further by saying that people that spend more time on the internet are more satisfied with their lives than people who spend less time on the internet. Social network sites like Facebook are designed to keep in touch with family, friends and acquaintances which in general are the ones most social capital is acquired from. Having a stronger relationship with them because of more frequent contact could therefore lead to more social capital (Burke et al., 2011). In the literature a lot of advantages of spending more time on social network sites are found. Social network site users can gather support, and therefore social capital, more easily. Of all social network sites Facebook is found to be the best to gain support. Brenner and Smith (2013) found that online social network site users have closer ties and relationships on average and are less likely to become socially isolated than people who do not spend time on social network sites. Also they are more politically and civically engaged (Gil de Zuniga, 2012). Rainie and colleagues (2011) add to this that social network users are more likely to be part of a voluntary group or organization. Common interest group can be set up on whatever topic can be thought of. Such interest groups can foster collective action. Also interactions between members of such groups can create trust, norms and reciprocity which are key elements of social capital (Putnam, 2000; Valenzuela et al. 2008). Facebook helps people with social anxiety to be social and with this combat feelings of loneliness (Clayton et al., 2013; Grieve et al., 2013). It gives a voice to otherwise silent and recessive teenagers and boosts their self-esteem by being able to relate to their peers

(Ellison et al., 2007). Facebook can even enhance social learning and cognitive skills (Alloway et al., 2013) and strengthen the social participation and well-being of the elderly (Näsi et al., 2012). All these findings suggest that the use of Facebook and social network sites in general has a positive effect on the acquisition of social capital and contradict the claims that more time on Facebook automatically leads to more social isolation and less involvement in society and the social world (Valenzuela et al., 2008).

4.4 Facebook and loneliness

Research on Facebook and loneliness is even more limited than research on Facebook and social capital. Let alone research that addresses the relationship between Facebook, social capital and loneliness. Despite of this there are several studies that give insight into what is already known about the relationship between Facebook and loneliness.

Studies like that of Lin (2001) show that social capital is embedded in social structures (e.g. social networks). Social capital can be acquired through interaction with persons in a social network. Facebook helps creating and maintaining a social network like never before. A large variety of social ties can easily be contacted and the possibilities for interaction are far greater than just having face-to-face contact. This contributes to building and maintaining a larger social network with more resources embedded in the social network and more social capital one can acquire (Bourdieu, 1986). On the other hand the studies of Kawachi and colleagues (1997), Aldemon (2005), Morgan and colleagues (2007) and Ferlander (2007) show evidence that social capital is good for health. All together this could suggest that Facebook increases the chance for acquiring social capital and in turn contributes to less feelings of loneliness.

Coleman's study (1990) suggests that people participate in events or interactions that are beneficial to them. Someone could participate in an interaction to try to control the outcome that is beneficial to that person's health. An example of this could be that someone will try to let another person like him or her so this that person will send him an online invitation on Facebook to his glamorous birthday party. This could bring a lot of joy and sense of belonging to the person being invited which will fight social isolation and feelings of loneliness. Another example could be that Facebook enables a chronically ill person who is rarely able to leave his home to contact and find support with people with the same misfortune which also contributes to someone's mental health, sense of belonging and combats feelings of loneliness.

Health problems can lead to being unable to create or maintain social relationships. This could eventually lead to loneliness and depression (Ferlander, 2007). Facebook enables people to come and stay into contact with people which would have been hard to do without Facebook. This can increase contact levels, levels of support and decrease chances of loneliness.

Kim and colleagues (2009) claim that people who use the internet more, are more likely to experience feelings of loneliness because they physically isolate themselves from the world outside. Skues and colleagues (2012) however, found that students that feel lonely report to use the internet and social network sites like Facebook more often than others. They even found that students that felt more lonely had more friends on Facebook than those who do not. This is probably due to active search for interaction and to compensate for their lack of interaction and connectedness in the offline world and feelings of loneliness that they experience in everyday life. Facebook gives them an opportunity to be socially active. It connects them with friends and their friends and by being part of this social network reduces feelings of being socially isolated. Amichai-Hamburger and Vinitzky (2010) on the other hand found that extrovert people generally have more Facebook friends and make more frequent use of Facebook than introvert people. However this does not necessarily mean that introvert people generally feel more lonely than extrovert people. Besides this, people with a high level of narcissism tend to make more use of Facebook than people who are less narcissistic. The reason for this could be that Facebook encourages narcissistic behaviour like self-promotion through posting photos or status updates (Buffardi & Campbell, 2008).

According to Sheldon (2008) shy people also tend to make more use of Facebook to combat loneliness because they can be social in a comfortable setting on Facebook despite of their social anxiety. Since shyness is characterized by social anxiety and an inhibition to react normal when in the physical presence of others (Orr et al., 2009), Facebook can function as a useful tool to interact with others. This could benefit these people in that they acquire more social capital (Steinfeld et al., 2008). The study by Sheldon (2008) however did not provide information on whether shy people actually engage in more social activities on Facebook or spent more time on other features of Facebook like playing games or reading the news. Another study that looks into shyness and Facebook is that of Orr and colleagues (2009). This study agreed with the claim that shy people spend more time on Facebook. However according to their investigation shyness was negatively correlated with number of friends on

Facebook. Also, they found that shy people reported to have a satisfying relationship with someone online sooner than people who are not shy and were more likely to establish a relationship online.

Ryan and Xenos (2011) even make a distinction between different kinds of loneliness, namely family, romantic and social loneliness. They agree with the claim that more active Facebook users are more narcissistic and extravert but they also claim that they have higher feelings of family loneliness. The main difference they found between these groups is that non-users have a higher social loneliness than Facebook users. However other kinds of loneliness were not higher among non-users. Still it is difficult to investigate differences between users and non-users. A reason why people do not use Facebook that Ryan and Xenos mention is that people with a smaller social network are less likely to use a social network site because there are less people to keep in contact with. It is however questionable if this hypothesis is right since people with a small social network could also be motivated to make use of social network sites to invest in their social network to expand it (Ellison et al., 2007). Another interesting finding by Ryan and Xenos that gives answer to the question of Sheldon (2008) on how shy and socially anxious people spend their time on Facebook is that these people spend more time on passive features than social activities and not much time is invested in improving their social skills and increasing their social capital. This could imply that these people will remain to feel lonely. Further investigation would be needed to test this hypothesis. Finally for romantic loneliness no significant results were found.

When looking at an experiment done by Deters and Mehl (2012) where a group of Facebook users were asked to increase their posting activity for one week and another group were asked to use Facebook just like they normally would they found that being more active in using Facebook by posting updates and commenting on posts feelings of loneliness were reduced. This because the more active Facebook users felt more connected to their friends. Not only due to increased contact and interaction between friends but being more active on Facebook itself already reduced feelings of loneliness. However not receiving any responses on status updates or posts can be perceived as social rejection as people assume their friends have read their posts and this can increase feelings of loneliness (Deters & Mehl, 2012).

4.5 Missing literature

As is presented in this chapter several studies have been conducted that revealed some information on relationships between Facebook and social capital, and Facebook and loneliness. In some literature similar investigations were conducted that also looked at Facebook and loneliness. For example Brenner and Smith (2013) found that social network site users are less likely to become socially isolated than people who do not use social network sites. However they do not make a distinction in the intensity of Facebook use. The same can be said for the studies by Clayton and colleagues (2013) and Grieve and colleagues (2013) that claim that Facebook use helps combat social anxiety and with this help combat loneliness but offer no sufficient evidence that Facebook use actually combats loneliness. Skues and colleagues (2012) claim that people that feel lonelier have more friends on Facebook and that Facebook grants them with the chance to be socially active. But again there is no sufficient proof that having more friends on Facebook and Facebook use in itself reduces feelings of loneliness. A research that comes closest to investigating if there is a relationship between the average amount of Facebook use of Facebook users and levels of perceived loneliness of Facebook users is the research of Deters and Mehl (2012). However in their research design there is still no clear distinction made in intensity of Facebook use. Although a group of Facebook users was asked to increase their activity on Facebook for a week and another group was asked to use Facebook as they normally would it is still unclear how intense these participants used Facebook on average per week. If someone that used Facebook very little was asked to increase their activity on Facebook and someone else that used Facebook intensively was asked to use Facebook as he or she normally would the latter would likely still use Facebook more often. Finally none of these studies includes social capital acquired through Facebook as a moderator in the relationship between Facebook use and levels of perceived loneliness.

There is no literature found that explicitly looks at the relationship between the average amount of Facebook use and levels of perceived loneliness of Facebook users and to what extent social capital acquired through Facebook influences this relationship. Even though the literature as presented in this chapter gives us some insights that can help answer the research questions it does not give us the complete answer. For this, extra empirical research is needed in the form of quantitative data, as will be presented in the next chapter.

5. Results survey

5.1 This chapter

In this chapter the results of the data collected using the online survey will be analyzed. Starting with a description of the research sample, followed by correlation analyses, regression analyses and a moderator analysis.

5.2 Characteristics of the research sample

Most of the respondents were females (n = 164, 71,6%) and a smaller group were males (n = 65, 28,3%). Almost all of the respondents were born in The Netherlands (n = 219, 95,6%). The majority of the respondents were either students (n = 119, 52%), employed (n = 140, 61,1%) or a combination of both. There were also a few exceptional cases like people that were unemployed, retired, unfit for work, worked at home on housekeeping or had a temporary interruption of occupational activity (n = 20, 8,7%). Table 1 shows the age distribution of the research sample.

Table 1: Age distribution

	Age
N	228
Minimum	17.00
Maximum	74.00
Mean	26.88
Standard deviation	10.45

As can be seen in Table 1 the youngest respondent was 17 and the oldest 74. The average age of the research sample was a little less than 27 years old.

Figure 1 shows whether respondents lived alone or with other people and with whom. The largest group lived with their parents or caretakers (n = 75, 32,7%), followed by respondents that lived with friends or roommates (n = 49, 21,4%), with a partner (n = 48, 21%), those who lived alone (n = 35, 15,3%), with a partner and children (n = 20, 8,7%) and a few that only lived with their children (n = 2, 0,9%).

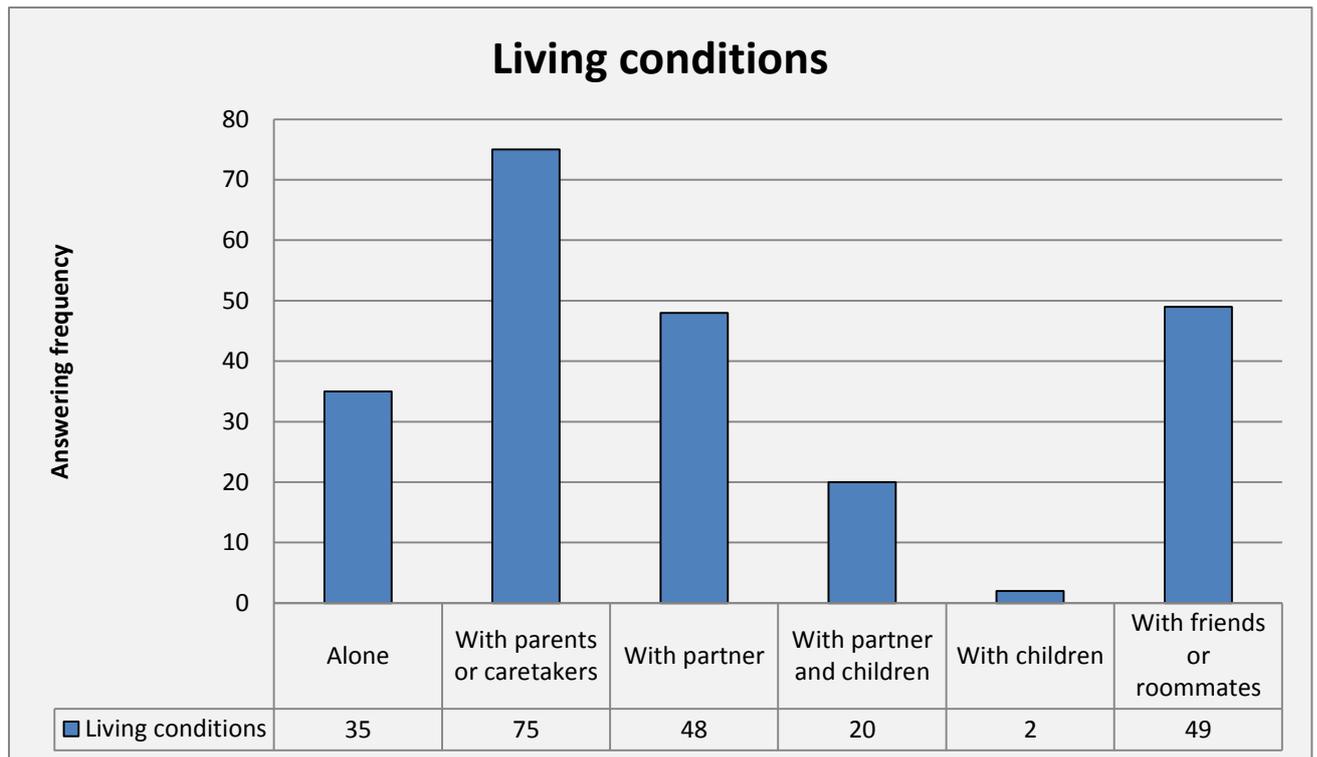


Figure 1: Living conditions of the research population.

Figure 2 shows the distribution of the different educational levels of the research sample. The educational levels are based on the Dutch educational system. From the lowest educational level on the left to the highest level on the right. Respondents were asked to report their highest completed study of which they graduated and received an official diploma. The largest group graduated for WO (n = 71, 31%) which is scientific education, followed by MBO 2-4 (n = 55, 24%) which is average profession focused education, HAVO/VWO (n = 44, 19,2%) which are higher educational levels in high school, HBO (n = 42, 18,3%) which is higher profession focused education, VMBO/MBO1 (n = 15, 6,5%) which are lower educational levels in high school and profession focused education and a few that only finished basic education like primary school (n = 2, 0,9%).

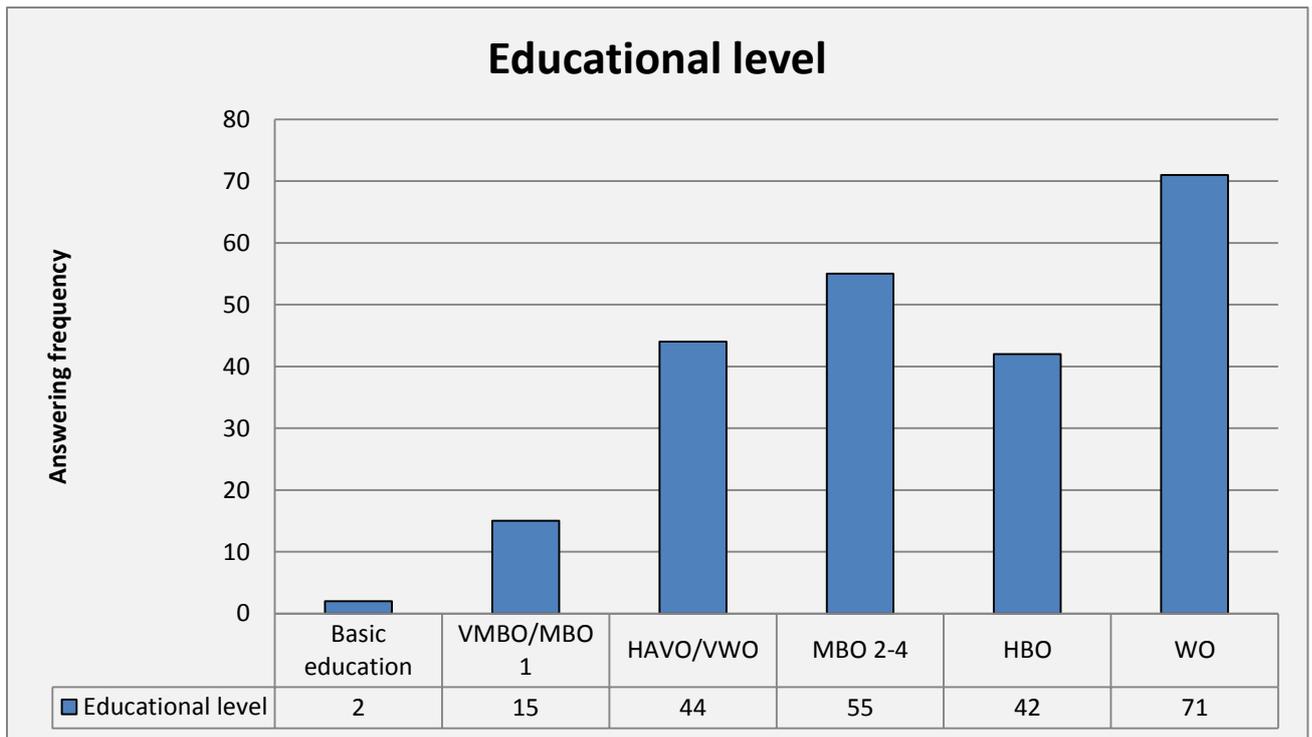


Figure 2: Educational level of the research population.

5.3 Time spent on Facebook

In order to link the intensity of Facebook use of Facebook users to levels of perceived loneliness and social capital acquired through Facebook respondents were asked to report the average amount of hours they spent on Facebook per week. A summary of the results is presented in Table 2 below.

Table 2: The average amount of hours spent on Facebook by Facebook users.

	Time on Facebook in hours
N	229
Minimum	0.00
Maximum	60.00
Mean	4.88
Standard deviation	5.83

As can be seen in Table 2 the results ranged from no time spent on Facebook to as much as 60 hours per week. The average Facebook use came down to a little less than 5 hours per week. The reported intensity of Facebook use in hours was linked to the level of perceived loneliness and level of social capital acquired through Facebook of each respondent separately.

5.4 Time spent on Facebook and perceived loneliness

In Table 3 an overview is presented on the perceived loneliness scores of the respondents. The measurement scale consistent of 20 statements. The lowest score per statements was 0 and the highest 3. After accumulating the statement scores respondents could have a final score from 0 (the lowest level of perceived loneliness) to 60 (the highest level of perceived loneliness).

Table 3: An overview of the levels of perceived loneliness of the research sample.

	Level of perceived loneliness
N	226
Minimum	0.00
Maximum	49.00
Mean	12.67
Standard deviation	8.89

As can be seen from Table 3 the results ranged from 0 to 49 which indicates that the research sample contained people that feel quite lonely and people that do not feel lonely at all. The average score was 12.67.

To help answer the first research question, whether there is a relationship between the intensity of Facebook use and the level of perceived loneliness of Facebook users, the correlation between the average hours Facebook users spent on Facebook per week and the level of perceived loneliness of Facebook users is calculated. Besides that, the amount of hours spent on Facebook and the level of perceived loneliness, variables social capital acquired through Facebook, age, sex, educational level and living conditions are incorporated in the correlation analysis to search for possible other correlations. The results are presented in Table 4. Variable occupational situation is not incorporated in the analysis since the answers could not be converted into a logical numeric scale.

Table 4: Pearson correlations

	Hours spent on Facebook	Level of perceived loneliness	Amount of social capital	Sex	Age	Education level	Living conditions
Hours spent on Facebook	-						
Level of perceived loneliness	-0.006	-					
Amount of social capital	0.268**	0.328**	-				
Sex	-0.106	-0.059	-0.103	-			
Age	-0.145*	0.085	-0.103	0.060	-		
Education level	-0.133*	0.045	0.080	-0.152*	-0.015	-	
Living conditions	0.090	-0.055	0.099	-0.120	0.082	0.112	-

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

The amount of hours spent on Facebook and the level of perceived loneliness correlated with -0,006 as can be seen in Table 4. This means that the relationship between these variables is not significant. In other words, there is no relationship found between the average amount of hours that Facebook users spent on average per week and the level of perceived loneliness of Facebook users.

5.5 Significant correlations

In Table 5 an overview is presented of the social capital scores of the respondents. The measurement scale consistent of 15 statements. The lowest score per statements was 0 and the highest 3. After accumulating the statement scores respondents could have a final score ranging from 0 (the lowest amount of social capital acquired through Facebook) to 45 (the highest amount of social capital acquired through Facebook).

Table 5: An overview of the amount of social capital acquired through Facebook of the research sample.

	Level of perceived loneliness
N	226
Minimum	0.00
Maximum	37.00
Mean	11.54
Standard deviation	7.58

As can be seen in Table 5 the social capital scores ranged from 0 to 37, which means that the research sample contained people that acquired a considerable amount of social capital through Facebook and people that do not acquire any social capital through Facebook. The average score was 11.54.

Even though there is no significant relation between the amount of hours spent on Facebook and perceived loneliness of Facebook users, Table 4 shows that there are other significant relationships found. First of all there is a highly significant correlation ($p = 0,000$) of 0,268 found between the amount of hours spent on Facebook and the amount of social capital acquired through Facebook. In other words, the amount of time spent on Facebook has a positive relationship with the amount of social capital that is acquired through Facebook. So the more time spent on Facebook the more social capital one acquires, or the other way around. This is however social capital acquired through Facebook and not social capital acquired in the offline world. Whether the amount of social capital acquired outside of Facebook increases or decreases when people spend more time on Facebook is unknown. Therefore it is hard to say whether someone's total social capital increases or decreases due to Facebook use.

Secondly there is a highly significant correlation ($p = 0,000$) of 0,328 found between level of perceived loneliness of Facebook users and amount of social capital acquired through Facebook. In other words, the level of perceived loneliness of Facebook users has a positive relationship with the level of social capital acquired through Facebook. This means that the lonelier someone feels the more social capital someone acquires through Facebook, or the other way around. This is possibly the most surprising and interesting finding of this research. This could suggest that people who feel lonely benefit from social network sites like Facebook and use it as a platform to build and maintain their social networks and to acquire

social capital. The two significant relationships are supported by the regression analysis in Table 6.

Table 6: Amount of social capital acquired through Facebook on Hours spent on Facebook and Level of perceived loneliness, N=229, listwise deletion of missing values, first unstandardized coefficients, second standardized coefficients, standard errors between brackets.

Amount of social capital acquired through Facebook	
Hours spent on Facebook	0.350 0.270 (0.079) **
Level of perceived loneliness	0.281 0.329 (0.052) **
(Constant)	24,240
R²	0.181

** . Correlation is significant at the 0.01 level (2-tailed).

Corrected for the level of perceived loneliness the relationship between the amount of hours spent on Facebook and the amount of social capital acquired through Facebook remained significant, and corrected for the amount of hours spent on Facebook the relationship between the level of perceived loneliness and the amount of social capital acquired through Facebook remained significant.

There are also some other correlations that do not help answering the research questions but were significant and interesting enough to mention. First of all there is a significant negative correlation (sig. 0,028) of -0,145 in the relationship between the amount of hours spent on Facebook and age. In other words, age has a negative relationship with the amount of hours that are spent on Facebook. The older people are the less time they spent on Facebook, or the other way around. Secondly there is a significant negative correlation (sig. 0,044) of -0,133 in the relationship between the amount of hours spent on Facebook and educational level. In other words, educational level has a negative relationship with the amount of hours that are spent on Facebook. So the higher someone's educational level the less time they spent on Facebook, or the other way around.

5.6 The influence of social capital

To be able to answer the second research question; to what extent the amount of social capital acquired through Facebook contacts influences the relationship between the level of perceived loneliness of Facebook users and the amount of Facebook use, a moderator analysis is conducted to calculate the influence of the amount of social capital acquired through Facebook on the relationship between the hours spent on Facebook and the level of perceived loneliness of Facebook users. In table 7 the results of the moderator analysis are presented.

Table 7: Regressions of Level of perceived loneliness on Hours spent on Facebook and Amount of social capital acquired through Facebook, N=229, listwise deletion of missing values, first unstandardized coefficients, second standardized coefficients, standard errors between brackets.

	Level of perceived loneliness
Hours spent on Facebook	-0.298 -0.197 (0.236)
Amount of social capital acquired through Facebook	0.383 0.328 (0.089) **
Interaction Hours on Facebook and amount of social capital	0.008 0.117 (0.011)
(Constant)	9.871
R²	0.119

** . Correlation is significant at the 0.01 level (2-tailed).

Table 7 shows that corrected for the amount of social capital acquired through Facebook the relationship between the amount of hours spend on Facebook and the level of perceived loneliness remained not to be significant. To be able to calculate the moderator effect of the amount of social capital acquired through Facebook on the relationship between the amount of hours spent on Facebook and the level of perceived loneliness, the interaction between hours on Facebook and the amount of social capital is calculated. Meaning that these two variables were merged into one by multiplying them with each other. In this way social capital acquired through Facebook could be incorporated in the relationship between hours spent on Facebook and the level of perceived loneliness. By performing a regression analysis between on the one hand the interaction between the hours on Facebook and the amount of

social capital and on the other the level of perceived loneliness, the influence of the amount of social capital acquired through Facebook on the relationship between the amount of hours spent on Facebook and the level of perceived loneliness could be calculated of which the results are presented in Table 7 on the third row. With a p-value of 0.488 there is no significant influence found of the amount of social capital acquired through Facebook on the relationship between the amount of hours spent on Facebook and the level of perceived loneliness.

In this chapter the statistical results of the data analysis of the survey were presented. In the next chapter these results will be interpreted and discussed.

6. Discussion

6.1 This chapter

In this chapter the results of this research will be interpreted and discussed, starting with the results of the literature study followed by the results of the survey. Strengths and weaknesses of the research will be discussed, the relevance of this research will be discussed and recommendations for further research will be given.

6.2 Interpretation and discussion on the results of the literature study

For this research an analysis is conducted on 49 articles to create an overview of what is already known about Facebook in relationship to loneliness and social capital. This analysis provided some interesting and helpful insights.

First of all literature shows that social capital can be acquired through Facebook (Ellison et al., 2007; Sabatini & Sarracino, 2014). Literature showed that social capital has a positive effect on health, well-being and sense of belonging (Kawachi et al., 1997; Aldemon, 2005; Ferlander, 2007; House et al., 1988) and that a lack of social capital can lead to social isolation and loneliness (Kawachi et al., 1997; Berkman & Glass, 2000). An important finding by Ellison and colleagues (2007) and Sabatini & Sarracino (2014) is that contact on Facebook is not substitute for offline and face-to-face contact but it is additional. Online contact even increases offline contact. This suggests that Facebook users acquired more social capital online and it encourages the acquisition of social capital offline. Facebook use helps accumulate and maintain the acquisition of social capital (Sabatini & Sarracino, 2014), encourages social participation (Bauernschuster et al., 2011; Rainie et al., 2011) and boosts self-esteem of otherwise recessive teenagers (Ellison et al., 2007).

Facebook enables socially anxious people to be socially active, acquire more social capital and hereby reduce social isolation (Skues, et al., 2012; Sheldon, 2008, Steinfield et al., 2008). Overall literature indicates that Facebook use increases the acquisition of social capital and is beneficial for people's health and sense of belonging, and reduces social isolation and feelings of loneliness (Ellison et al., 2007; Sabatini & Sarracino 2014; Bauernschuster et al., 2011; Pénard & Poussing, 2011; Burke et al., 2011; Brenner and Smith, 2013; Gil de Zuniga, 2012; Rainie et al., 2011; Clayton et al., 2013; Grieve et al., 2013; Näsi et al., 2012; Skues et al.,

2012). This is in contrast to the general idea in the 00's that more internet and social media would make people less social and would increase social isolation (Putnam, 2000; Bartolini & Bonatti, 2003; Nie et al., 2002; Valenzuale et al., 2008; Kim et al., 2009).

6.3 Interpretation and discussion on results of the survey

This research has given some interesting insights on what relationship Facebook use has with the level of perceived loneliness of Facebook users and the amount of social capital Facebook users acquire through Facebook, and on the relationship between feelings of loneliness and amount of social capital acquired through Facebook. First of all this research has shown that the average amount of time Facebook users spend on Facebook per week does not have a significant relationship with the level of perceived loneliness of Facebook users. This suggests that people that spend little time on social network sites like Facebook do not necessarily feel excluded, socially isolated or lonely because they do not take part in this online social network as intensively as others. On the other hand people that spend a lot of time on Facebook do not necessarily feel lonelier because of physical exclusion from the offline social world. This is in line with the results of the literature study that suggest that Facebook use rather decreases than increases social isolation and feelings of loneliness, as is presented in 6.2.

The literature study indicated that Facebook use could decrease loneliness. This is however not supported by this research. A reason for this could be that no other research made a distinction between intensity of Facebook use when feelings of loneliness were measured among Facebook users. It could have led to other results if there was a distinction made in the intensity of Facebook use the literature discussed in the literature study. The reason for the relationship between the intensity of Facebook use and the level of perceived loneliness not being significant could be that contact on Facebook is not substitute for offline contact but it is additional, like Ellison and colleagues (2007) and Sabatini and Sarracino (2014) suggest. Spending time on social media does not seclude one from the social world but creates chances for being socially active (Steinfeld et al., 2008). Online contact even leads to more offline contact (Sabatini & Sarracino, 2014). Bearing this in mind it is even surprising that there is no significant negative correlation found between the intensity of Facebook use and the level of perceived loneliness. In other words, that Facebook use decreases feelings of loneliness. A reason that this negative correlation is not found could be that contact on Facebook is not as satisfying as contact in the offline world and that contact on Facebook does not have such an

impact on people's social life that it drastically influences sense of belonging, social isolation and feelings of loneliness. Since no relationship is found between the intensity of Facebook use and feelings of loneliness this research counteracts future concerns about Facebook use leading to loneliness.

A highly significant relationship is found between Facebook use and social capital acquired through Facebook. Facebook users that spend more time on Facebook indicated to acquire more social capital through Facebook, and the other way around. This relationship makes sense since the more someone invests in his (online) social network the more likely it is to get more out of it. This counts for social capital as well. It is however still not necessarily obvious that someone actually acquires social capital through an online social network like Facebook. However, the literature study conducted for this research confirmed the acquisition of social capital through Facebook and that Facebook use leads to more social capital (Ellison et al, 2007; Sabatini & Sarracino, 2014; Burke et al., 2011; Valenzuela et al., 2008). The positive relationship between Facebook use and the acquisition of social capital also supports the findings by Sheldon (2008) and Steinfield and colleagues (2008) that Facebook is a helpful tool for those who have difficulty building and maintaining a social network in real life. This could be because of various reasons like social anxiety or physical impairment. Facebook gives these people the chance to be socially active and to acquire social capital that would otherwise have been difficult to come by because of shyness or a lack of mobility. Knowing this, people with problems like social anxiety or physical impairment can be encouraged to use Facebook to acquire social capital. With this health and sense of belonging can be increased, and social isolation and feelings of loneliness can be decreased (Kawachi et al. 1997; Aldemon, 2005; Ferlander, 2007).

Another highly significant relationship is found between the level of perceived loneliness and the amount of social capital acquired through Facebook. Interestingly respondents that felt lonelier, reported to acquire more social capital through Facebook, and the other way around. This indicates that higher feelings of loneliness lead to more social capital that is acquired through Facebook, and the other way around. Although the exact reason for this is unknown it could be that people that feel lonely are more motivated to invest in their social network and use Facebook as an effective and comfortable platform to acquire social capital. This to compensate for their lack of social capital in the offline world, like Skues and colleagues (2012) suggest. On the other hand, it could also suggest that social capital acquired through

Facebook is not as valuable or satisfying as social capital acquired in the offline world. It could be that when more social capital is acquired through Facebook, less more valuable social capital is acquired in the offline world. This could lead to less satisfaction with one's social life and more feelings of loneliness. Further investigation will be needed to find out whether social capital acquired through Facebook is as satisfying as social capital acquired in the offline world which could explain why Facebook users that acquire more social capital through Facebook feel lonelier.

The moderator analysis has shown that the amount of social capital acquired through Facebook does not have a significant influence on the relationship between the amount of hours spent on Facebook and the level of perceived loneliness. A reason for this could first of all be that there was no significant relationship found between the intensity of Facebook use and the level of perceived loneliness of Facebook users. Social capital acquired through Facebook cannot have an influence on a relationship that does not exist. It is however interesting to speculate about why social capital acquired through Facebook does not have an influence on the relationship between the intensity of Facebook use and the level of perceived loneliness of Facebook use if there was a relationship found. If this was the case a reason for social capital acquired through Facebook to not have an influence on this relationship could be that a lack of offline social contact on itself leads to loneliness and not particularly resources that are acquired through social contact.

Finally this research indicates that the amount of time spent on Facebook decreases with age. This is in line with the age distribution of Facebook users in the Netherlands that show that younger people form the majority of Facebook users (Minkjan, 2011). Also this research indicates that people with higher educational levels spend less time on Facebook than lower educated people. Although the exact reason for this is unclear it could be that higher educated people have different interests and are less motivated to be active on Facebook when people with similar educational levels are not active either.

6.4 Methodological considerations

This research has contributed to the understanding of Facebook, its influence on feelings of loneliness and its function as a platform for the creation and maintenance of social networks and the acquisition of social capital. No other research has focused on this understanding of Facebook in this relatively new research area of social network sites and the online world in

general. This research analyzed literature on Facebook, loneliness and social capital. An overview is created on what is known about the relationships between Facebook use and loneliness, Facebook use and social capital and combined Facebook, loneliness and social capital with the help of a survey. The created survey is carefully checked with the help of a pilot study to enhance its quality. It is a helpful tool for the measurement of level of perceived loneliness and the amount of social capital acquired through Facebook with a Cronbach's alpha of respectively 0.911 and 0.874. The research was strong in terms of selection of participants. Only Facebook users were able to participate in the research which facilitated a direct connection to the target population, which were Facebook users.

Some remarks can be made on the generalizability of the research population. The size of the research sample is relatively small ($N = 229$). It is hard to say to what extent this sample represents all Facebook users. However due to limited time available for data collection it was impossible to get a larger sample. The average age of the research sample was 26.88 years old. This is a relatively young research sample. Therefore the results cannot be generalized to different age groups. The reason for the relatively young research sample is that the survey was distributed through my own friend list on Facebook at first. Most of my friends are around the same age as me and therefore the people that filled in the survey are relatively young. However the aim of this research was to investigate if there is a relationship between the amount of Facebook use and the level of perceived loneliness of Facebook users in general. There was no focus on a specific age group. Plus Facebook is most popular amongst people aged between 25 and 34, followed by 18 to 24 (Minkjan, 2011). Demographical statistics of Facebook users worldwide show that indeed that largest group of Facebook users are indeed aged between 18 and 29. The sex distribution worldwide is also in line with the research sample of this research. There are more women active on Facebook than men. 76% of female internet users and 66% of male internet users are active on Facebook (Duggan et al., 2015). Almost the entire research sample consists of people born in the Netherlands. So the results cannot be generalized to other countries and populations. However, considering the similarities in sex and age distribution the research sample is generalizable to other countries and populations to some extent.

The rest of the characteristics of the research sample were relatively well balanced. Particularly the living conditions. No group exceeds 75 people (with parents or caretakers, 32,7%) or is lower than 20 people (with partner and children, 8,7%), except for those who

only live with their children but this is rather exceptional. The research sample is somewhat highly educated but this is in line with the average educational level in the Netherlands. The percentage of higher educated people in the Netherlands is high while the percentage of lower educated people has decreased over the last decade (CBS, 2013). Finally the occupational situations show that most respondents either work or go to school which is normal. The other answering options are rather exceptional apart from being retired. The low number of retired people might suggest that either Facebook is less popular amongst elderly people, which is in line with the findings in this research that Facebook use decreases with age. Other possible reasons could be that elderly people are less or likely to fill in an online survey due to little internet use or the low numbers are due to my friend list, and my friends friend lists, barely containing any elderly people. The worldwide age distribution also show that only a relatively small number of people aged 65 and above are active on Facebook (Duggan et al., 2015).

The average age of the research sample is in line with the age group that is most active on Facebook worldwide, the educational level of the research sample is in line with the Dutch population, women use Facebook more often than men, the living conditions of the research sample are well balanced and that there is a normal distribution in occupation situations. Besides this, research by online research facility Multiscope (2013) show that the average hours spent on Facebook per week is six hours in the Netherlands. This is not far of the five hours the research sample of this research spends on Facebook per week. Considering this it can be concluded that the research sample is generalizable to a larger population and the results of this research are representable.

It is possible that respondents gave social desirable answers since most of the respondents are people from my social network. However by clarifying that the answers given in the survey are anonymous and confidential, by not mentioning what the research is about and by asking the respondents to fill in the survey as genuinely as possible beforehand this is hopefully brought down to an acceptable minimum.

Finally it is difficult to say something about the causality of the relationships in this research. For example it is not clear whether more Facebook use leads to more social capital being acquired through Facebook or that more social capital being acquired through Facebook leads to more Facebook use. Also it is hard to say if increased feelings of loneliness lead to more acquisition of social capital through Facebook or that increased acquisition of social capital

through Facebook leads to increased feelings of loneliness. Although assumptions can be made on what seems most logical, for example that more Facebook use leads to increased acquisition of social capital through Facebook, this remains speculation. Making assumptions on the causality of the relationship between the amount of social capital acquired through Facebook and the level of perceived loneliness is harder to do so. It could be that increased feelings of loneliness motivate people to invest in their social network online and therefore acquired more social capital through Facebook but it is also possible that when more social capital is acquired through Facebook but less in the offline world people could on average acquire less (satisfying) social capital which could lead to more feelings of loneliness.

6.5 Relevance of this research

This research has contributed to the scientific knowledge on Facebook and its influence on feelings of loneliness and the acquisition of social capital, and on the relationship between the acquisition of social capital through Facebook and feelings of loneliness. This research aims at raising awareness of the impact of Facebook use on feelings of loneliness and the chances of Facebook use for the acquisition of social capital. Insights derived from the research can be used in future research that focuses on Facebook, loneliness and/or social capital and in interventions that focus on decreasing loneliness.

6.6 Recommendations for further research

A lot is still unknown about the impact of social network sites like Facebook on society and people's lives. This research linked feelings of loneliness to Facebook but many other feelings, behaviours, attitudes, norms and values can be linked to Facebook as well. In that sense the options for further research on Facebook are endless. As for the topic in this thesis some recommendations are that more research could be conducted on (1) the causality of the relationships found in this research, (2) Facebook use and perceived loneliness in different age groups, SES levels and nationalities, (3) how social capital is actually acquired through Facebook and what mechanisms underlie this phenomenon, (4) what kind of social capital is acquired through Facebook, e.g. (5) whether social capital acquired through Facebook is as satisfying as social capital acquired in the offline world, (6) why people that feel lonelier acquire more social capital through Facebook, or (7) how Facebook can be used in practice to combat loneliness or how negative consequences of Facebook that create loneliness can be combatted.

7. Conclusion

In this chapter the research questions, whether there is a relationship between the amount of Facebook use and the level of perceived loneliness of Facebook users, and to what extent the amount of social capital acquired through Facebook influences this relationship, will be answered.

This research shows that there is no relationship found between the amount of hours Facebook users spent on Facebook and their level of perceived loneliness. In other words, the intensity of Facebook does not seem to influence feelings of loneliness of Facebook users. Social capital does not have an influence on the relationship between the intensity of Facebook use and the level of perceived loneliness. Social capital is however significantly related to feelings of loneliness and the intensity of Facebook use. The more time is spent on Facebook the more social capital is acquired through Facebook, or the other way around. And the lonelier Facebook users feel the more social capital they acquire through Facebook. This suggests that social capital is an important actor to be considered when looking at feelings of loneliness in the online world and that social network sites like Facebook form an important platform to be considered when looking at the acquisition and influence of social capital.

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Appendix

Figure 3: UCLA Loneliness Scale (Russell, et al. 1978).

Scale:

INSTRUCTIONS: Indicate how often each of the statements below is descriptive of you.

C indicates "I often feel this way"
 S indicates "I sometimes feel this way"
 R indicates "I rarely feel this way"
 N indicates "I never feel this way"

1. I am unhappy doing so many things alone	O S R N
2. I have nobody to talk to	O S R N
3. I cannot tolerate being so alone	O S R N
4. I lack companionship	O S R N
5. I feel as if nobody really understands me	O S R N
6. I find myself waiting for people to call or write	O S R N
7. There is no one I can turn to	O S R N
8. I am no longer close to anyone	O S R N
9. My interests and ideas are not shared by those around me	O S R N
10. I feel left out	O S R N
11. I feel completely alone	O S R N
12. I am unable to reach out and communicate with those around me	O S R N
13. My social relationships are superficial	O S R N
14. I feel starved for company	O S R N
15. No one really knows me well	O S R N
16. I feel isolated from others	O S R N
17. I am unhappy being so withdrawn	O S R N
18. It is difficult for me to make friends	O S R N
19. I feel shut out and excluded by others	O S R N
20. People are around me but not with me	O S R N

Scoring:

Make all O's =3, all S's =2, all R's =1, and all N's =0. Keep scoring continuous.

Figure 4: Adapted Social Capital Assessment Tool (A-SCAT) (Harpham, et al. 2002).

Table 1. The Adapted Social Capital Assessment Tool (A-SCAT)

A. Structural ('connectedness')	B. Cognitive (reciprocity, sharing, trust)
(1) Participation in organizations.	(1) General social support.
(2) Institutional linkages (connections to services, facilities and organizations).	(2) Emotional support (enabling people to 'feel' things).
(3) Frequency of general collective action.	(3) Instrumental support (enabling people to 'do' things).
(4) Specific collective action (whether people would get together to address named hypothetical situations).	(4) Informational support (enabling people to 'know' things).
(5) Degree of citizenship (whether the respondent has voted/campaigned/taken part in other neighbourhood or city-wide activity).	(5) Trust.
(6) Links to groups with resources (such as local government or aid agencies).	(6) Fellow feeling. ^a
(7) Links to parallel groups (namely other communities).	(7) Reciprocity and co-operation.
	(8) Social harmony.
	(9) Sense of belonging.
	(10) Perceived fairness (would others in the community take advantage of people).
	(11) Perceived social responsibility (would others in the community return lost items).

^a Phrase coined by Adam Smith (1759) in *The Theory of Moral Sentiments*. Fellow feeling was a term used to refer to principles in man's nature which interest him in the fortunes of others.

The online survey (style is adjusted for paper version)

Beste Facebook gebruiker,

Hartelijk dank dat u mee wilt werken aan deze vragenlijst. De antwoorden die u geeft zijn volkomen anoniem en vertrouwelijk. Ze worden enkel voor onderzoeksdoeleinden gebruikt. Het invullen van de vragenlijst zal ongeveer 5 minuten in beslag nemen.

Ik zou u vriendelijk willen verzoeken de vragenlijst tot het eind in te vullen en tot het eind door te klikken. Anders kan de door u ingevulde vragenlijst niet mee worden gerekend voor het onderzoek.

In het eerste deel worden er een aantal algemene vragen gesteld.

U bent een...

- Man
- Vrouw

Wat is uw leeftijd?

Wat is uw geboorteland?

- Nederland
- Anders, namelijk...

Woont u alleen?

- Ja
- Nee, bij mijn ouders of verzorgers
- Nee, met vrienden en/of huisgenoten
- Nee, met mijn partner
- Nee, met mijn partner en kinderen
- Nee, met mijn kinderen

Wat is uw hoogst **voltooide** opleiding? Hiermee bedoelen we een opleiding waarvan u een diploma of getuigschrift ontving.

- Basisonderwijs

- VMBO/MBO1
- HAVO/VWO
- MBO 2-4
- HBO
- WO
- Anders, namelijk...

Duidt de situatie(s) aan die momenteel op u van toepassing is/zijn. Meerdere antwoorden zijn mogelijk.

- Student
- Betaald werk
- Werkloos
- Arbeidsongeschikt
- Gepensioneerd
- Ik ben huisvrouw / huisman
- Tijdelijke onderbreking van beroepsactiviteit (bijv. door zwangerschapsverlof of ziekteverlof)
- Anders, namelijk...

De volgende vraag gaat over de intensiteit van uw Facebook gebruik.

Hoeveel tijd spendeert u gemiddeld per week op Facebook? Vul het aantal uren in. (Rond af op kwartieren indien nodig, bijvoorbeeld twee uur en een kwartier is 2,25, twee en een half uur is 2,5, etc.).

In het volgende deel staat een lijst met uitspraken. Geef voor elke uitspraak aan in welke mate u dit ervaart.

Geef aan welke mate u de volgende uitspraken ervaart.

	Vaak	Soms	Zelden	Nooit
1. Ik vind het jammer dat ik veel dingen alleen moet doen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Ik heb niemand om mee te praten	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Ik kan er niet tegen om alleen te zijn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Ik heb een gebrek aan verbondenheid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Het voelt alsof niemand me echt begrijpt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Ik wacht op telefoontjes of berichten van anderen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Er is niemand bij wie ik terecht kan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Vaak	Soms	Zelden	Nooit
8. Ik heb het gevoel dat ik geen hechte band meer heb met iemand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Mijn interesses en ideeën komen niet overeen met die van mensen om me heen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Ik heb het gevoel dat ik nergens bij hoor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Ik voel me helemaal alleen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Vaak	Soms	Zelden	Nooit
12. Ik ben niet in staat om mensen om me heen te benaderen of met ze te communiceren	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Mijn sociale relaties zijn oppervlakkig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Ik hunker naar gezelschap	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Vaak	Soms	Zelden	Nooit
15. Niemand kent me echt goed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Ik voel me geïsoleerd van anderen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Ik vind het jammer dat ik zo teruggetrokken ben	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. Ik vind het moeilijk om vrienden te maken	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. Ik voel me buitengesloten door anderen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. Er zijn wel mensen in mijn buurt maar toch voel ik me alleen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

In het nu volgende en laatste deel staat wederom een lijst met uitspraken. Geef wederom voor elke uitspraak aan in welke mate u dit ervaart.

Geef aan welke mate u de volgende uitspraken ervaart.

	Vaak	Soms	Zelden	Nooit
1. Wanneer ik mij somber voel vind ik steun bij mijn vrienden op Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Als ik verdrietig ben vind ik steun bij mijn vrienden op Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Als ik iets wil lenen dan raadpleeg ik mijn vrienden op Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Ik raadpleeg Facebook als ik op zoek ben naar informatie over een bepaald onderwerp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Het vertrouwen in mijn vrienden wordt vergroot als ik ook contact met ze heb op Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Facebook versterkt het gevoel van vriendschap dat ik heb met vrienden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Hoe meer ik en mijn buurtgenoten met elkaar bevriend zijn op Facebook, hoe hoger het gemeenschapsgevoel	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Facebook geeft me het gevoel dat ik erbij hoor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Vaak	Soms	Zelden	Nooit
9. Op Facebook ben ik meer open over mezelf dan ik dat normaal ben	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Wanneer ik een verloren voorwerp van iemand vind zou ik dit eerder terug geven aan een persoon waarmee ik bevriend ben op Facebook dan aan iemand waar ik niet bevriend mee ben op Facebook.
11. Facebook verhoogt het verband dat ik heb met organisaties of verenigingen waar ik deel van uitmaak
12. Via vrienden op Facebook kom ik in contact met organisaties
13. Ik maak gebruik van Facebook voor het doen van groepswerk (voor school of werk)
14. Facebook spoort me aan om deel te nemen aan uitjes met de buurt
15. Vrienden op Facebook brengen mij in contact met mensen die ik niet ken

Let op! Druk op Verder om de survey te voltooien. Anders kan de door u ingevulde vragenlijst niet worden meegeteld.

Hartelijk dank voor uw medewerking!

Tot slot zou ik u willen vragen het door mij geposte bericht met de link naar deze vragenlijst te **delen** op Facebook. U zou mij daar erg mee helpen om een groter publiek te bereiken!

Nogmaals bedankt!

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