Facebook user perceptions of privacy and security on Facebook, between Millennials’ and Non-Millennials’

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Facebook is a platform used to generate and share content across a large network of users. It is currently experiencing an increase in popularity, especially among Non-Millennials’ and can become a part of ones daily routine. Users vary in their awareness of privacy and security while sharing information online. Third parties easily obtain information that is made digitally public. This study examines Millennials’ and Non-Millennials’ perceptions of their privacy and security on Facebook. Focusing on how this influences their Social Media behavior, in terms of their trust, attitude, self-disclosure and motivation to use Facebook. Statistical analysis using data generated by our survey (337) reveals that Millennials’ and Non-Millennials’ have different perceptions on privacy, attitude, motivation and trust while active on social media. The study also validates that age has a moderating effect on perceived privacy and security towards social media behavior. Further analysis was done to examine the different motivational factors that influence Millennials’ and Non-Millennials’ to use Facebook.

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Keywords
Perceived Security, Perceived Privacy, Facebook, Millennials’, Non-Millennials’, Motivation, Social Media Behavior

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1. INTRODUCTION

Internet usage has seen dramatic, almost exponential, growth over the past few years (Odlyzko 2003). Even though the notion of social networking can be traced back to the 1960’s, its viral use began with the invention of the internet (Gross and Acquisti 2005). More and more people of different age groups are using Online Social Networks (OSN) in their daily life. The multitude of social media sites such as, Facebook, Instagram and Twitter provide users with a platform to share, consume, and create user-generated content on a constant basis. Millions of users share private content online, and Facebook is the most visited online social networking site, reaching a variety of different age groups (Gross and Acquisti 2005). Even though Facebook users are presented with the opportunity to create and share user generated content and with the opportunity for easy communication (Shin 2010), the increase in usage has also increased the privacy and security issues that arise with it (Donath 2007). Due to the frequent use of these sites, involving a broad array of information input, OSN’s can obtain a massive amount of data which is easily accessible, this includes individual preferences and consumer behavior (Zheleva and Getoor 2009, Gayo-Avello, Peter Gloor et al. 2013). In the age of big data, one of the biggest concerns that users face, is discovering who is obtaining this information and what are these companies and online sites doing with the information that OSN platforms make attainable (Jackson, Von Eye et al. 2003, Madden 2012). Social media is becoming a larger part of people’s lives, therefore it is essential that OSN users understand the privacy rights that they risk due to their frequent online lifestyle. The amount of content people share online depends on the security and privacy perception they have concerning these sites (Shin 2010). In addition to understanding the various motivational factors and to explain what motivates people to share content online (Ryan and Deci 2000, Sweetser and Kelleher 2011) helps to gain a better understanding of users Social Media Behavior. Prior research has shown that users can act online due to personal commitment or by public pressures, when no alternatives may be present (Ryan and Deci 2000). Moreover the motivational factors could give us a deeper understanding of why users are tempted to use Facebook. 

Scarce research has been conducted concerning the privacy and security perceptions of different age groups actively using OSN. Consequently I think it would be of interest to research different age group perceptions of privacy and security on Facebook (OSN Platform). The different age groups I will focus on are Millennials’ born between 1980 and 2000, which grew up into the age technology and of sharing content on the internet (Hill, Betts et al. 2015). As well as the age group of Non-Millennials’ (50+), which have to continuously adapt to new technology and online usage (Hill, Betts et al. 2015). Furthermore it would be of interest to investigate the different motivational factors that might influence different age groups to continually share private content on Facebook. I want to investigate the differences between both age related behaviors and how this is linked with users perception of their privacy and security.

This paper aims to address users privacy and security perception of information sharing as well as understand the motivation behind the usage of Facebook in users daily life between different age groups.

In order to gain insight into the differences between Millennials’ and Non-Millennials’ the paper addresses the following research questions:

RQ1: What is the effect of privacy and security perceptions of Facebook users on their social media behavior?

RQ2: How does age affect this relationship between users privacy and security perceptions and their social media behavior?

RQ3: What motivates users of different age groups to use Facebook?

This paper is divided into different sections, the first section consists of a brief description of my Theoretical Framework followed by a Literature Review in order to gain a theoretical understanding of the topic and to see what previous research has found. The second part is the Method, this section describes how exactly the survey was conducted and the key elements that are important to the study. The forth part describes the Results and Findings, in which I analyzed the data and tested the hypothesizes. The Discussion, giving Theoretical and Practical Implications to the study, is followed by its limitations. The last part consists out of a Conclusion.

2. THEORETICAL FRAMEWORK

A Theoretical Framework was derived (Figure 1), which was influenced by an already existing research model from Shin (2010). New to this model is that one’s Attitude, Trust, Self-Disclosure and Motivation towards Facebook are used as measures of Social Media Behavior. Age will be used as a mediating factor. The research question: “What is the effect of privacy and security perceptions of Facebook users on their social media behavior?” will be investigated by hypothesis testing. The Literature Review will further investigate each variable according to already existing research and explain their meaning in this paper.

![Figure 1: Theoretical Framework](image)

3. LITERATURE REVIEW

Online Social Networks, such as Facebook have become an integrated part of Millennials’ and Non-Millennials’ every day lives. Used for communication, sharing information, or just to pass the time, electronic communication tools help us stay connected at all times (Read, Woolcott et al. 2011). Facebook is one of the biggest and most used OSN sites, revealing information about oneself is easier than ever by creating a online social identity (Read, Woolcott et al. 2011). Those online social identities can include private photos, real names, personal preferences and including the amount and identity of our friends (Lawler and Molluzzo 2010). However sharing this
kind of information in today’s age of big data also comes at a risk. Third-party developers are allowed to monitor Facebook users daily activity, giving some Facebook users a false sense of both their security and privacy (Shin 2010). Moreover the threat of identity theft has been increasing over the past years, due to the wide range of personal information accessible on OSNs (Dwyer, Hiltz et al. 2007). Nevertheless user numbers are increasing, despite the associated risks of online information sharing. The success of Social Networks is due in part to the amount of content people share with each other and the reach those contributions have to a larger proportion of users (Burke, Marlow et al. 2009). However at the same time this reach is limited to the privacy settings of each user. Therefore sites such as Facebook need to identify the external and internal factors that motivate people to engage on those platforms and understand the concerns that people have in order to create a better social media environment for all stakeholders.

3.1 Millennials’ and Non-Millennials’ who are they?
In order to analyze the differences and similarities between the two age groups within their social media usage, it is important to understand what is actually meant by Millennials’ and Non-Millennials’ and what makes them different from each other.

3.1.1 Millennials’
Millennials’ are, in this paper, referred to as young adults between the ages of 18-24, therefore born between 1991-1997. For clarification Millennials’ referred to in other articles are born in the year of 1991 and after. Nevertheless I am only going to focus on the 18-24 year olds due to the fact that I wanted people of legal age in order for my study to be consistent and reliable.

Most Millennials’ grew up with a computer in the house, giving them access to the online world at a very young age. Especially since online communication was soon to become an important aspect of their lives (Aksoy, van Riel et al. 2013). Lots of researchers agree that Millennials’ actively share and create content online, which evidently make them ‘heavy’ social media users (Dye 2007, Palfrey and Gasser 2013). Palfrey and Gasser (2013) even go so far to say that the online word has become as real for Millennials’ as the real word, multitasking between different tools, such as smartphones, tablets and laptops to stay connected at all cost. Park, Kee et al. (2009) indicate that Millennials’ use social media for the same reason as any other generation, such as information seeking, entertainment and socializing.

3.1.2 Non-Millennials’
Non-Millennials’ in this paper are referred to as the age group from 1936 to 1967. Previous research divided them even further into different categories such as the Silent Generation (1925-1945) and the Baby-Boomers (1946-1960) (Aksoy, van Riel et al. 2013). However in this paper I divided to group them together in order to get a wider spectrum of answers and to only compare them with the Millennials’ and therefore not subdivide the age group further.

Findings show that Non-Millennials’ are more inclined towards TV usage as opposed to Internet usage, due to the fact that the majority of them grew up with a Television in the household acting as a source to gather information, with the help of printed Newspapers (V. Shah 2001, Christofides, Muise et al. 2012). Due to the increasing presence of computers, opening opportunities in the online world, this generation has slowly adapted and has become more active within this field (V. Shah 2001, Aksoy, van Riel et al. 2013). Research indicates that since 2008 there has been an increase of 175% of women older than 55 to have joined Facebook (Hempel and Kowitt 2009). This gives reason to believe that Facebook and social media in general has become more attractive for Non-Millennials’ to join and use these platforms to share content online and use Facebook as a tool to socialize (Christofides, Muise et al. 2012).

3.2 Perceived Privacy among Millennials’ and Non-Millennials’
In this paper perceived privacy will be defined as ‘an individual’s perception of how well they conceal information about themselves and therefore select the information they want to share with others’. Shin (2010) refers to privacy in OSNs as the control one can act upon in order to conceal or share private information. A study found that most Facebook users are aware of the privacy settings and restrictions within Facebook and also make use of them to some extent. However most still have only a blurred understanding of what actually happens with their data (Debatin, Lovejoy et al. 2009). When looking at Facebook’s history in terms of their privacy issues it is clear that, especially in the beginning, Facebook struggled to keep up with their users’ privacy rights. It took Facebook 3 years in order for the feature “only visible for friends” to be actually working (Jones and Soltren 2005). In addition after finding out that Facebook was collecting data and saving all information ever posted, huge protest were held in 2007. However Facebook still continues to store information (Debatin, Lovejoy et al. 2009). Additionally data mining has become an increasing threat for Facebook users privacy. Third parties are allowed to store information of users and therefore have the ability to gather a huge amount of personal information and preferences and group them into user profiles (Russell 2013). The Facebook Iceberg Model can be used to illustrate the problem of a weak understanding of ones privacy on Facebook (Figure 2). The information flow on Facebook can be distinguished in two parts, the visible part and the invisible part. The visible part represents Facebook from the users perspective, this includes sharing information and viewing user-generated content, as mentioned in the model the “fun-part” about Facebook. The invisible part on the other hand is fed constantly by the information people willingly share in the visible part. Creating a huge amount of data that is used to create user profiles and targeted advertisement. As the picture suggests this can be seen as an iceberg most users are only aware of the surface but do not understand, know about, or care for the underlying issues when sharing data online. This is also what motivates users to continually share information and to update their profiles, because most of them only see the top of the iceberg, the “fun part” of Facebook.

Figure 2 The Facebook Iceberg Model (Iceberg image © Ralph A. Clevenger/CORBIS)
Evidence for such behavior is that even though many users are aware of the privacy settings most keep their default settings and therefore rely upon or trust in Facebook’s starting privacy settings (Debatin, Lovejoy et al. 2009). Especially among Millennials’, this is a wide spread phenomena, they desire to include personal information and content on their profile and evidently share this with their friends (Debatin, Lovejoy et al. 2009). They are eased in believing that because they only share their information with their “friends” their privacy may not be at a considerable risk.

To sum up, there is a lot of information about how Facebook has violated the privacy settings of users in the past. However little is known over how many users understand what their settings for privacy are, or to what extent these users may perceive themselves as being ‘private’ on Facebook. Focusing this research on the differences of Millennials’ and Non-Millennials’ differentiates it from most research whose focus was on the privacy perception of Millennials’ and not Non-Millennials’. Based on previous research I hypothesize that Non-Millennials’ have a higher perceived perception of their privacy as opposed to Millennials’. This is due to the stronger motivation that Millennials’ have to include and actively share their personal information. However I believe that because Non-Millennials’ tend to be more concerned with personal information, they may have a higher perception of their online privacy.

H1: Non-Millennials’ have a higher perceived privacy perception then Millennials’ towards Facebook.

3.3 Perceived Security among Millennials’ and Non-Millennials’

Perceived Security can be seen as one of the most recent threats that users have begun to encounter when active on OSN’s. Therefore those sites attempt to emphasize measures that protect their users (Kwon, Park et al. 2014). Perceived Security on OSN’s can be defined as ‘a users perception of the extent to which the usage of those networks will be risk-free’ (Shin 2010). As mentioned in Perceived Privacy users of Social Media Networks have mentioned that there is an increase in concern about their security on those sites (Acquisti and Gross 2006, Dwyer 2007). Previous studies have their focus more on e-commerce security and the payment methods used on those various platforms. This study looks at perceived security from a more generalized perspective, with regards to ones feeling of security in order to feel “risk-free” during interactions on Facebook. Linck, Poustchli et al. (2006) indicate that consumer’s trust and intentions are influenced by their perceived security. There has been little research conducted concerning users perceptions of security, as most research has focused on online transactions. Millennials’ seem to have concerns towards their security on OSN’s and in addition their perceived security is highly related to their trust towards the site and their intentions as to why they make use of it (Shin 2010).

There are also indications that Millennials’ are not concerned about their privacy and security on Social Network sites and are rather satisfied with the service the sites provide, as most students indicate to have never read the privacy policies OSN sites publish (Lawler and Mollozzo 2010). Non-Millennials’ perception on security is to some extent different as they also fear that there is not enough transparency to what actually happens with their data as well as their concern about the site itself, referring to actions done by the site with their private information (Nyemba, Mukwasi et al. 2011). Nevertheless there is limited research that tries to explain Non-Millennials’ perception of security on Facebook.

H2: Millennials’ have a higher perceived security on Facebook than Non-Millennials’.

3.4 Social Media Behavior

In general Social Media Behavior can be seen as ones specific behavior and his or her intentions to perform this sort of behavior (Ajzen and Fishbein 1980). In order to gain a deeper understanding of users intentions to act on Facebook: Trust, Attitude, Self-Disclosure and Motivational considerations have been included. All these Factors play a role in order to determine ones Social Media Behavior.

3.4.1 Trust

In this paper trust will be defined as ‘ones willingness to be exposed to the actions of another party, in this case Facebook’ (Dwyer 2007). Trust has become an important factor when it comes to ones perception of privacy, further it is also an important component for online businesses in order to be successful (Dwyer, Hiltz et al. 2007, Lauer and Deng 2007). It is, not only, important to trust a website but also to be able to trust the people users are friends with on Facebook. Some research is focusing on Facebook users trust in ‘people’ on this site, they are focusing on the relationship between people on Facebook and not so much on Facebook as a trust barrier in itself (Valenzuela, Park et al. 2009, Rouis, Limayem et al. 2011). However in my study I would like to focus merely on the likelihood that people see Facebook as a trustworthy network. Even though it has been suggested that platforms with a privacy policy increase the chances of users trusting the OSN (Lauer and Deng 2007). Users might be to overconfident in their skills and knowledge to protect themselves from privacy threats (Chen and Michael 2012). Consequently users do not make use of such privacy tools or even know enough about their privacy rights on such sites. Especially in regard to Millennials’ and Non-Millennials’ it would be interesting if they have a different perception of trust on Facebook. Knowing that Millennials’ grew up with Social Media Networks and therefore might be more likely to trust Facebook as a consequence of years of interaction on this site. As well as Non-Millennials’ who are fairly new to this phenomenon ‘Facebook’ and are therefore less likely to trust it.

H3: Millennials’ have a higher perception of trust towards Facebook then Non-Millennials’.

3.4.2 Attitude

Attitude can be seen as ones behavioral intentions towards a specific behavior (Shin 2010). Firstly one has to understand the attitude Facebook users have towards the platform and what their intentions are to use it. Secondly the silent beliefs and evaluations of the users towards the site may play an important role (Shin 2010). In addition ones attitude towards Facebook can change over time, depending on the new features Facebook includes and the perception people have towards those new features (Lampe, Ellison et al. 2008). It is important to note that Millennials’ as well as Non-Millennials’ might have different intentions to use Facebook. As Millennials’ like to use the site to “stay in touch” with friends and to actively use it as a communication tool (Raacke and Bonds-Raacke 2008, Park, Kee et al. 2009). There is not so much known about the Non-Millennials’ intentions to use Facebook so one could assume that they have similar intentions such as to socialize. However Leung (2013) indicates that Non-Millennials’ tend to use Social Media as platforms in order to engage in intellectual dialogue and discussions rather than for pure entertainment purposes. Based on previous research I suggest that Millennials’ have a higher attitude towards Facebook then Non-Millennials’, since they have more motivation to be social as well as to use
Facebook as a means of entertainment, which was not indicated for Non-Millennials’.

H4: Millennials’ have a more positive attitude towards Facebook then Non-Millennials’.

3.4.3 Self-Disclosure

Ledbetter, Mazer et al. (2010) explain the concept of Self-Disclosure as “any message about the self that a person communicates to another”. Self-Disclosure can be seen as a ‘right’ on OSN sites in order for oneself to protect their private information. Such information can include names, pictures and hobbies etc. but also comments and ‘likes’ people share with others (Petronio 2012). In 2006 Facebook introduced the feature “News Feed”, which showed the immediate changes people did to their profiles and displayed them for all people to see them in a concentrated place (Lampe, Ellison et al. 2008). This change could have lead to an increase in peoples Self-Disclosure due to the high visibility of their actions and consequently even changed their Social Media Behavior. In terms of Self-Disclosure between Millennials’ and Non-Millennials’ Christofides, Muise et al. (2012) indicate that despite the fact that one expects Millennials’ to be less careful about their privacy and self-disclosure, there is evidence that Millennials’ as well as Non-Millennials’ seem to have a similar perception of Self-Disclosure and Privacy.

H5: Millennials’ and Non-Millennials’ have similar Self-Disclosure perception on Facebook.

3.4.4 Motivation

Motivation can be seen as all aspects of a person’s intentions and activation (Ryan and Deci 2000), it can also be summarized into two main groups: knowledge sharing and emotional motives (self-expression) in addition to that, entertainment can also be seen as a motive for a user to be active on OSNs (Heinonen 2011). Therefore the usefulness of Facebook to stay in contact with old friends and to gather information about events and products as well as the enjoyment users get out of Facebook can contribute to the factors that motivates people in order to use Facebook (Lin and Lu 2011). Studies show that Millennials’ are more motivated to share content online due to the fact that they themselves enjoy to see what others are “up to” and to “keep in touch” with friends (Joinson 2008). Li-Barber (2012) further indicates that Millennials’ are also motivated to use Facebook in order to “pass the time” as well as for entertainment purposes. However it is not clear to what extent different age groups are motivated to share content online. Most studies have concentrated their attention towards the motivational factors of Millennials’, however only little is known about what motivates Non-Millennials’ to be present and share content online. Consequently, based on previous research I assume that Millennials’ have more motivation to be active on Facebook as opposed to Non-Millennials, as they not only use it to socialize but also for entertainment reasons and to “pass the time”.

H6: Millennials’ have higher motivation to use Facebook then Non-Millennials’.

4. METHODS

4.1 Instrument development

Online search engines such as Google Scholar and Scopus have been used in order to gather useful information for the literature review. Moreover relevant literature was also extracted from the online library of the University of Twente.

In order to gather relevant data for the empirical study, an online survey had been conducted. The survey tool Qualtrics was used to create an online questionnaire. The survey was conducted together with six other students. Since all students had similar research questions within this field of study, it was convenient to group together in order to benefit from a higher respondent rate within a shorter amount of time. Due to the fact that the students all targeted different age groups there were no interferences later in the study.

Designs validated in previous research had been used to conduct the study. The items have all been measured on a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). The questionnaire questions are included in the Appendix. A double translation function (English and Dutch) was included, since the students expected most of the respondents to be Dutch and especially in hindsight of reaching a wider age group with the possibility that they would feel more comfortable to answer the questions in Dutch than in English. The first part asked questions about the demographics and the usage quantities of Facebook of the participants. The other parts where divided into perceived privacy, perceived security, self-disclosure, attitude, trust and motivation of the participants towards Facebook.

4.2 Materials and Respondents Rate

The survey was conducted on the 11th of May and ended on the 16th of May 2016. The online survey questionnaire Qualtrics was used to create the survey and posted to the students Facebook walls. Therefore following the snowball effect and encouraged friends and family to share this survey as well. At the end of the survey the students had a total of 448 respondents of which 349 completed the whole survey until the end. Moreover 12 responses had to be taken out due to invalid answers. In total the students therefore had 337 responses of which 165 belonged to the age group 18-24. 52 responses were from 25-34 year olds, 51 from 35-50 and the rest of 69 responses belong to the age group of 50+. In my case I was only looking at the age group of 18-24 year olds mentioned in this paper as Millennials’ and the age group of 50+ referred to as Non-Millennials’. Hence my total responses count was 234. Due to the large sample size of my Millennials’ responses of 165 and the smaller respondents rate of 69 within my Non-Millennials’ I had to make the decision of straight lining by creating 3 randomly selected samples. This way I was able to create equal samples of Millennials 55 and for Non-Millennials 69. SPSS 22 has been used in order to analyze my data.

4.3 Measurements

The measurements in this study are all based upon previous research that has been validated and was considered reliable. The measures of perceived privacy, Attitude and Trust have been used from Shin (2010). Measures for perceived security have been used from Shin (2010) as well as from Yenisey, Ozok et al. (2005) Measurements for Motivation have been used from Park, Kee et al. (2009).

After the operationalization each construct was turned into a variable. Questions about Perceived Privacy were turned into the variable ‘Perceived Privacy’ (PP). Questions about Perceived Security were turned into the variable ‘Perceived Security’ (PS). This resulted in a further variable named ‘Perceived Privacy and Security’ (PPS). Questions about Attitude, Trust, Motivation and Self-Disclosure were turned into the variables ‘Attitude’ (A), ‘Trust’ (T), ‘Motivation’ (M) and ‘Self-Disclosure’ (SD). Those were later used to measure the variable ‘Social Media Behavior’ (SMB). My Independent Variables where ‘Perceived Privacy and Security’. Hence my Dependent Variable was ‘Social Media Behavior’, measured by ‘Attitude’, ‘Trust’, ‘Motivation’ and ‘Self-Disclosure’. I used ‘Age’ as my Moderating Variable in order to observe if Age has an effect on the Independent and Dependent Variable.
A Cronbachs Alpha (CA) has been used in order to test the reliability of the findings. It would be ideal to have all of my values to be above 0.70 (Shin 2010). However my CA resulted in lower than expected figures, in order to increase the CA in some cases a question has been removed. This was done in order to reach a higher and more reasonable CA. The internal reliability within Perceived Security is the lowest with 0.338 indicating only a 33.8% internal correlation after removing two questions. For Perceived Privacy the internal correlation was already 77.2%, which is a reasonable reliability. The removal of a question or set of questions adjusted the CA in a positive manner due to the readjustments of the groupings of questions to gain a more reliable internal correlation. Table 2 shows the descriptive statistic. For ‘Perceived Privacy’ and ‘Perceived Security’ as well as for ‘Attitude’, ‘Trust’ and ‘Motivation’ a score of 1-3 can be considered a low score, 3.1-4.5 a medium score and 4.6-7 a high score. In case of ‘Self-Disclosure’ a score of 1-4 can be considered a low score, 4.1-7 a medium score and 7-10 a high score.

The mean for ‘Perceived Privacy’ for Millennials’ is 3.2970 and for Non-Millennials’ it is 3.8744 with a total mean of 3.6183. Indicating a medium score for both Millennials’ and Non-Millennials’. For ‘Perceived Security’ the mean for Millennials’ is 4.1273 and for Non-Millennials’ it is 4.3865 with a total mean of 4.2715. This again indicates that both age groups have a medium score. Millennials’ have a mean of 4.7455 and the Non-Millennials’ a slightly larger mean of 5.5121 in ‘Attitude’ with a total mean of 5.1720. Both age groups score high on their attitude towards Facebook. For ‘Trust’ the Millennials’ have a mean of 3.3818 and the Non-Millennials’ a mean of 4.1014, with a total mean of 3.7823. Both age groups score again a medium score on ‘Trust’. In terms of ‘Motivation’ the Millennials’ have a mean of 4.0618 and the Non-Millennials’ a mean of 4.8261, with a total mean of 4.4871. Indicating a medium score for Millennials’ and a high score for Non-Millennials’. Non-Millennials’ have on average a higher mean in all categories than Millennials’. For ‘Self-Disclosure’ the mean for Millennials’ is 6.2182, which indicates a medium score and for Non-Millennials’ the mean is 4.1014, which indicates a medium to low score. The total mean for both age groups is 5.0403. However it is to note that the standard deviation in all cases is rather large, almost always above 1. This gives us an indication that the numbers are spread out from the mean.

5. RESULTS AND FINDINGS
Due to the large sample size in the category of Millennials’ I created three sample sizes, which I randomly selected. The three sample sizes are consistent out of 55 randomly selected Millennials’ and the 69 Non-Millennials’, in order to create a more reliable and robust analysis. Table 2 shows the descriptive statistic. For ‘Perceived Privacy’ and ‘Perceived Security’ as well as for ‘Attitude’, ‘Trust’ and ‘Motivation’ a score of 1-3 can be considered a low score, 3.1-4.5 a medium score and 4.6-7 a high score. In case of ‘Self-Disclosure’ a score of 1-4 can be considered a low score, 4.1-7 a medium score and 7-10 a high score.

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Table 2: Descriptive Statistics

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<td>3</td>
<td>55</td>
<td>6.2182</td>
<td>1.89239</td>
</tr>
<tr>
<td></td>
<td></td>
<td>69</td>
<td>4.1014</td>
<td>1.89539</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>124</td>
<td>5.0403</td>
<td>2.16175</td>
</tr>
<tr>
<td>Motivation</td>
<td>3</td>
<td>55</td>
<td>4.0618</td>
<td>1.80863</td>
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<tr>
<td></td>
<td></td>
<td>69</td>
<td>4.8261</td>
<td>1.19554</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>124</td>
<td>4.4871</td>
<td>1.10571</td>
</tr>
</tbody>
</table>
Table 3. Correlation Perceived Privacy and Security, Attitude, Trust, Self-Disclosure, Motivation, Age, Education

**Correlations**

<table>
<thead>
<tr>
<th>Perceived Privacy and Security</th>
<th>Perceived Privacy and Security</th>
<th>Attitude</th>
<th>Trust</th>
<th>Self-Disclosure</th>
<th>Motivation</th>
<th>Age</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>124</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Attitude                      |                                 |          |       |                 |            |     |           |
| Pearson Correlation           | .417**                         | 1        |       |                 |            |     |           |
| Sig. (2-tailed)               |                                |          |       |                 |            |     |           |
| N                             | 124                            |          |       |                 |            |     |           |

| Trust                         |                                 |          |       |                 |            |     |           |
| Pearson Correlation           | .638**                         | .491**   | 1     |                 |            |     |           |
| Sig. (2-tailed)               |                                |          |       |                 |            |     |           |
| N                             | 124                            |          |       |                 |            |     |           |

| Self-Disclosure               |                                 |          |       |                 |            |     |           |
| Pearson Correlation           | .012                           | .012     | .083  | 1               |            |     |           |
| Sig. (2-tailed)               |                                |          |       |                 |            |     |           |
| N                             | 124                            |          |       |                 |            |     |           |

| Motivation                    |                                 |          |       |                 |            |     |           |
| Pearson Correlation           | .379**                         | .558**   | .332**| -.140           | 1          |     |           |
| Sig. (2-tailed)               |                                |          |       |                 |            |     |           |
| N                             | 124                            |          |       |                 |            |     |           |

| Age                           |                                 |          |       |                 |            |     |           |
| Pearson Correlation           | .192**                         | .343**   | .268**| -.452**         | .316**     |     | 1         |
| Sig. (2-tailed)               |                                |          |       |                 |            |     |           |
| N                             | 124                            |          |       |                 |            |     |           |

| Education                     |                                 |          |       |                 |            |     |           |
| Pearson Correlation           | .015                           | .140     |    .107| -.246          | .187**     | .355**| 1         |
| Sig. (2-tailed)               |                                |          |       |                 |            |     |           |
| N                             | 124                            |          |       |                 |            |     |           |

* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed).

Table 3.1 Correlation Gender and Nationality

**Correlations**

<table>
<thead>
<tr>
<th>Spearman's rho</th>
<th>Nationality</th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
<th>Nationality</th>
<th>Gender</th>
<th>Correlation Coefficient</th>
<th>Sig. (2-tailed)</th>
<th>Nationality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1,000</td>
<td></td>
<td></td>
<td></td>
<td>.118</td>
<td></td>
<td>1,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>.191</td>
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</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5.1 Inter-relations and hypothesis testing

The correlation table (Table 3) describes the degree of relationship between two variables. In this case I am measuring the degree of relationship between ‘Perceived Privacy and Security’ (PPS), ‘Attitude’, ‘Trust’, ‘Self-Disclosure’, ‘Motivation’, ‘Age’ and ‘Education’ against each other. I used a significance level of alpha = 0.05.

‘Perceived privacy and security’ almost always shows some kind of relationship with the other variables, especially the relationship between PPS against ‘Trust’. This relationship shows a correlation of 0.638 this can be considered a strong uphill relationship. This means that any increases in PPS will generally result in an increase in users Trust or vice versa. PPS’s relationship with ‘Attitude’ (0.417) and ‘Motivation’ (0.379) can be considered to be a weak to moderate uphill relationship. However ‘Age’ (0.192), ‘Education’ (0.015) and ‘Self-Disclosure’ (-0.012) show only a very weak to no linear relationship between PPS. ‘Attitude’ and ‘Trust’ (0.491) however indicate a moderate uphill relationship as well as ‘Attitude’ and ‘Motivation’ (0.558). Also ‘Attitude’ and ‘Age’ (0.343) seem to be correlated in a weak uphill relationship. ‘Trust’ and ‘Motivation’ (0.332) as well as ‘Trust’ and ‘Age’ (0.268) show only a weak uphill relationship between each other. As ‘Age’ seems to have with each variable a weak correlation and even with ‘Self-Disclosure’ (-0.452) a moderate downhill correlation I can assume that ‘Age’ has to some extent a linear relationship with each variable. It is to note that ‘Self-Disclosure’ shows only with ‘Age’ and to some extent with ‘Education’ (-0.246) a negative correlation. For all other variables it seems to have no linear relation. The same goes for Education, as it seems that there is no significant linear correlation with the other variables. A Spearman’s rho correlation table (Table 3.1) was conducted in order to observe the correlation between ‘Nationality’ and ‘Gender’. However there has been no correlation between those two variables.
Table 4. ANOVA

<table>
<thead>
<tr>
<th>Control Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(F-Value (sig.))</td>
<td>(F-Value (sig.))</td>
<td>(F-Value (sig.))</td>
</tr>
<tr>
<td>Education</td>
<td>15.88 (0.00)*</td>
<td>15.88 (0.00)*</td>
<td>15.88 (0.00)*</td>
</tr>
<tr>
<td>Gender</td>
<td>0.890 (0.347)</td>
<td>0.890 (0.347)</td>
<td>0.890 (0.347)</td>
</tr>
<tr>
<td>Nationality</td>
<td>19.988 (0.00)*</td>
<td>19.988 (0.00)*</td>
<td>19.988 (0.00)*</td>
</tr>
</tbody>
</table>

Table 6.1 Regression Table with predictors, Perceived Privacy and Security

Table 6.2 Coefficients with Dependent Variable, Attitude, Trust, Self

The ANOVA test of variance (Table 4) shows statistically significant differences or lack thereof concerning the different variables and their relationship with the two age groups. ‘Gender’ had no significant difference between Millennials’ and Non-Millennials’ (F=0.898 p=0.347). ‘Perceived Privacy’ showed significant differences between Millennials’ and Non-Millennials’ (F=8.229 p=0.005). P<0.05 therefore I can reject the Null-hypothesis in favor of the Alternative Hypothesis. Moreover the perception of ‘Trust’ shows also a significant difference between Millennials’ and Non-Millennials’ with an F value of 10.145 and a p-value of 0.02. I can observe a significant difference between Millennials’ and Non-Millennials’ in ‘Self-Disclosure’ (F=38.224 p=0.00), therefore I have to reject the Null-hypothesis, that there is no significant difference between Millennials’ and Non-Millennials’ and their perception of privacy. This result does not take into account personal opinion in users perception this may have a large impact on the survey results and therefore the analysis.

However there seems to be no significant difference between the age groups and ‘Perceived Security’ as the F-value was 1.409 with a p-value of 0.238. P>0.05, thus, I fail to reject the Null-Hypothesis this means there is no significant difference between Millennials’ and Non-Millennials’ and their perceived security. Results identify that the perception of ‘Attitude’ on Facebook between Millennials’ and Non-Millennials’ shows a significant difference (F=18.002 p=0.00). P<0.05 thus I reject the Null-hypothesis, in favor for the Alternative Hypothesis.

Table 6.1 Regression Table with predictors, Perceived Privacy and Security

Table 6.2 Coefficients with Dependent Variable, Attitude, Trust, Self-Disclosure and Motivation

Coefficients

a. Predictors: (Constant), Perceived Privacy and Security

Table 6.2 Coefficients with Dependent Variable, Attitude, Trust, Self-Disclosure and Motivation

Coefficients

a. Dependent Variable: Attitude, Trust, Self-Disclosure, Motivation
5.2 Predicting Facebook use between Millennials’ and Non-Millennials’

A regression analysis has been conducted in order to indicate if there is a relationship between ‘Perceived Privacy and Security’ and ‘Social Media Behavior’ and if ‘Age’ acts as a moderating variable.

The first regression table (see Appendix Table 5.1, 5.2) describes the relationship between ‘Nationality’, ‘Gender’, ‘Education’ and ‘Age’ with ‘Attitude’, ‘Trust’, ‘Self-Disclosure’ and ‘Motivation’. It is to note that there has been no linear relationship between those variables.

The second regression table (Table 6.1, 6.2) describes the relationship between PPS with ‘Attitude’, ‘Trust’, ‘Self-Disclosure’ and ‘Motivation’. The regression equation shows a pattern that ‘Perceived Privacy and Security’ have a positive effect on all the variables except for ‘Self-Disclosure’. Meaning that when PPS among Millennials’ and Non-Millennials’ goes up their Social Media Behavior in terms of Attitude, Trust and Motivation towards Facebook also increases. However there is no evidence that Perceived Privacy and Security have an influence on Self-Disclosure.

The third regression table (Table 7.1, 7.2) tests if there is a relationship between the ‘Perceived Privacy and Security’, with ‘Age’ as moderating variable, and ‘Attitude’, ‘Trust’, ‘Self-Disclosure’ and ‘Motivation’. There is evidence that ‘Perceived Privacy and Security’ with ‘Age’ as moderating variable has a positive effect on all other variables, except for ‘Self-Disclosure’. Therefore indicating that Age acts as a moderating variable between Perceived Privacy and Security and Social Media Behavior.

5.3 The Motivation factors between Millennials’ and Non-Millennials’

This section will test the different factors that motivate Millennials’ and Non-Millennials’ to use Facebook. I categorized questions into different factors: Socializing, Information, Entertainment and Self-seeking. I have created an ANOVA test with an alpha of 0.05 in order to see if there are differences among the age groups and if these differences are significant. (see Appendix Table 8.2).

There is an indication that Millennials’ and Non-Millennials’ have different motivations. As there are significant differences between the age groups in Socializing (F=32,400 p=0.00), Entertainment (F=12,481 p=0.001) and Self-seeking (F=14,277 p=0.00). Indicating that there is evidence that different age...
groups have different motivations to use Facebook. Information seeking also showed a significant difference with an F value of 7.606 and a p-value of 0.007. The graph below shows the different means among Millennials and Non-Millennials between the different motivational factors. Non-Millennials’ tend to use Facebook more for Socializing, Self-seeking purposes and information gathering; Millennials’ use Facebook more for Entertainment reasons. The graph (Graph1) represents visually the scale to which Millennials and Non-Millennials differ in their motivation reasons behind their Facebook usages.

Graph 1: Comparing Millennials in their motivation to use Facebook

6. DISCUSSION

In this section I will discuss the findings of my research and link it to theoretical and practical implication. This research has focused on the differences between Millennials’ and Non-Millennials’. However previous research has mostly focused on Millennials, therefore it might be difficult to generalize previous findings and apply them to our case. Nevertheless my study supports previous research.

6.1 Summary of Findings

6.1.1 Privacy Perception

Current literature has only examined the Privacy perception among students or young adults. (Shin 2010). My findings show that there is significant difference between the Perceived Privacy between Millennials and Non-Millennials. Where Non-Millennials rate their privacy on privacy higher than Millennials’. Millennials’ low privacy perception was also documented in recent research (Debatin, Lovejoy et al. 2009) and can also be seen in the study. This finding also confirms my H1, as Non-Millennials tend to have a higher perceived privacy then Millennials’. Nevertheless it needs to be taken into account that the mean for both age groups is relatively low, indicating that even though Non-Millennials have a somewhat higher perception on their privacy (3,8744) then Millennials’ (3,2970) both age groups perceive their privacy to some extent to be at risk on Facebook. This could be due to the many privacy issues Facebook has had in the past. Users do not know who actually collects their data and what happens to the data they share online. This can also be seen in the ‘Facebook Iceberg Model’ as most users are not aware of the exact nature of data being collected and what they actually share online. This has been confirmed by my study.

6.1.2 Security Perception

In terms of security perception among Millennials’ and Non-Millennials’ the results indicate that there is no significant difference between Millennials’ and Non-Millennials’ and their perceived security. Both age groups have a total mean of 4,6516 with only slight variation as Millennials’ have a slightly lower mean (4,6109) as Non-Millennials’ (4,6841). This result lets me reject my H2 as both age groups have a similar perception on their security. The means from both age groups indicate that they feel like there is, to some small extent, a mechanism in place to keep them secure from threats on Facebook such as private group features as well as the mechanism to block certain users from viewing their content online. However a trend can be seen that has also been indicated by previous research as the concerns among the age groups about their security is increasing (Acquisti and Gross 2006).

6.1.3 Social Media Behavior

Social Media Behaviour was analysed by looking at participant’s attitude, trust, self-disclosure as well as their motivation towards Facebook. There are significant differences that can be observed when looking at the differences between Millennials’ and Non-Millennials and their Attitude, Trust, Self-Disclosure and Motivation towards Facebook.

According to my study Non-Millennials rate their Trust towards Facebook higher then Millennials’, therefore I have to reject my H3 as Non-Millennials’ have higher trust in Facebook then Millennials’. This allows me to assume that due to the fact that Millennials’ have been growing up with Social Media Networks they know more about the problems that Facebook had in previous years with their privacy policies since they might even have been affected by it and therefore are less likely to trust Facebook. Previous research also indicates that trust and Perceived Security are linked with each other (Shin 2010), this can also be observed in our study, as the correlation with Perceived Privacy and Security and Trust is the highest I have observed. This can also be seen between the two age groups as Non-Millennials’ rate their Perceived Privacy and Security higher and consequently have a higher perception of trust towards Facebook. This leaves room for interpretation as to why this is the case. I could argue this is the case because Non-Millennials’ are rather “new” on Facebook and therefore might not have encountered any threats such as cyber-stalking or identity theft yet. The older age group may be more trusting due to their lack of knowledge behind OSNs, big data, data mining, and target marketing meaning their trust in Facebook may be misplaced or spawns from a lack of company transparency.

The attitude towards Facebook also showed significant differences between the two Age groups, as Non-Millennials’ rate their attitude towards Facebook higher then Millennials’. Again I expected that Millennials’ have a higher attitude towards Facebook than Non-Millennials’, this was not the case and therefore I reject my H4. This could be because, as stated by Lampe, Ellison et al. (2008), users attitude towards Social Media Networks can change over time, meaning that as Facebook is fairly new to Non-Millennials’ their attitude is higher because it is ‘new’. Millennials’ see it as a means to communicate, becoming a part of their daily routine but they do not see it as very appealing in general. Previous research indicates that Non-Millennials’ attitude towards Facebook could be to be engage more in intellectual dialogue with others (Lampe 2013), this could also be an indicator why Non-Millennials’ prefer to socialize more and have a rather high score on Information seeking on Facebook as I have observed within the motivation Factors.
Christofides, Muise et al. (2012) state that both Millennials’ and Non-Millennials’ have a similar perception of Self-Disclosure on Facebook. However I observed a significant difference between the age groups, as Millennials ‘tend to be more disclosed then Non-Millennials’. This also rejects my H5 as I made an educated guess based on previous research that both age groups would have a similar perception on their Self-Disclosure. Nevertheless Self-Disclosure had no correlation with any other variable. Further there seems to be no relationship between Perceived Privacy and Security and Self-Disclosure. This result seems to disagree with previous research, this relationship should be investigated in more detail to understand the reasons behind the difference.

In terms of Motivation I wanted to know what motivates different Age groups to use Facebook. The research shows that there are significant differences between Millennials’ and Non-Millennials’ having different motivational factors. I am forced to reject my H6 as Non-Millennials’ seem to have a higher motivation to use Facebook then Millennials’. The research indicated that Millennials’ tend to use Facebook more for entertainment reasons, such as to “pass the time” and to look at videos that were shared on their ‘wall’ (main profile information space), which was also observed by previous research (Liu and Lu 2011, Li-Barber 2012). Non-Millennials’ use Facebook more as a means to socialize with others and for self-seeking purposes as well as information gathering purposes. Since there is only little research about Non-Millennials’ behaviour and their motivation factors, I think this is an interesting finding and could be used in order to conduct further research within this field and look closer to the different motivation factors in more detail.

![Diagram](image) Figure 5: Adjusted Theoretical Framework (Relationship between the Perceived Privacy Security, with Age as moderating variable, and Attitude (0,002), Trust(0,002), Self-Disclosure (-0,004) and Motivation (0,003).

Concluding, the findings suggest that there is evidence that ‘Perceived Privacy and Security’ with ‘Age’ as the moderating variable has, to some extent, a positive influence on Social Media Behavior (Figure 5), which was defined by ‘Attitude’, ‘Trust’, ‘Self-Disclosure’ and ‘Motivation’ to use Facebook. Only Self-Disclosure showed no influence by Perceived Privacy and Security. This allows me to conclude that with a higher perception of privacy and security, a user’s Social Media behaviour increases as well. Further it seems like that Millennials’ and Non-Millennials’ have different motivations factors that influence them to use Facebook in different ways, as Millennials’ tend to use Facebook for entertainment reasons and Non-Millennials’ more for socialising and self-seeking.

### 6.2 Theoretical Implications

This study combines assumptions from Shin (2010) towards users ‘Perceived Security and Privacy’, ‘Trust’ and ‘Attitude’ with assumptions from Christofides, Muise et al. (2012) towards users ‘Self-Disclosure’ as well as Park, Kee et al. (2009) towards users ‘Motivation’ to be on Facebook. Furthermore this paper includes insight into the differences between two major age groups and their Social Media Behavior.

First and foremost, this study confirms already existing literature as Shin (2010) indicates that Trust and Perceived Security are highly linked, this can also be seen in my study. However the Cronbachs alpha was to some extent smaller than the Cronbachs Alpha of the existing literature, this can be due to the fact that some questions where modified to fit the study and a suitable level of Cronbachs Alpha. The findings from Christofides, Muise et al. (2012) also indicate that Millennials’ and Non-Millennials’ have similarities within their perception of Self-Disclosure which was not observed within my study and therefore indicates an interesting found as to why this is the case.

Secondly, there is only little research conducted towards the Motivation Factors that influence Millennials’ and Non-Millennials’ to be active on Facebook. My findings indicate similar findings as Park, Kee et al. (2009) have found. Millennials’ use Facebook for entertainment, and information seeking reasons as well as socializing. However the introduction of Non-Millennials’ is new to this field and provides further studies with groundwork to analyses those differences in more depths. Since my study indicates interesting findings towards Non-Millennials’ motivation to socialize and information gathering compared to Millennials’.

Lastly, the theoretical strength of this study lies in its investigation of users Facebook perception on privacy and security in a new model. The findings of my research provide empirical evidence that there is in fact a positive relationship between Perceived Privacy and Security towards Social Media Behavior with Age as moderating variable. As mentioned in the Literature Review, participants Trust, Attitude, Self-Disclosure and Motivation, measured Social Media Behavior. By combining existing literature and trying to find a new way to measure Social Media Behavior, which has not been attempted in previous research, this study contributes to a better understanding of Social Media Behavior in the field of social sciences. Further it provides new insights into the Perceived Privacy and Security between Millennials’ and Non-Millennials’ and their Social Media Behavior, as most research has focused only on the perceptions of Millennials’.

### 6.3 Practical Implications

The research can provide Social Networks and especially Facebook a deeper insight into Users behavior especially regarding different age groups.

#### 6.3.1 Privacy Perception

As mentioned within the theoretical implications, there has been a significant difference between Millennials’ and Non-Millennials’ and their privacy perceptions. However both age groups indicate that they have a medium privacy perception towards Facebook. Consequently, Facebook could use this information in order to provide users with a better
understanding about their privacy. Informing users about who is collecting their data and also to create a better mechanism to provide users with a better understanding about Facebook’s Privacy policy.

6.3.2 Security Perception
Security perception among Millennials’ and Non-Millennials’ showed no significance. However both groups feel like there is to some extent a good mechanism in place to protect them from misuse of information. Facebook should use this in order to create an even safer platform for its users, as there could be improvements in their current security mechanisms. This could alter in a better user security perception and consequently increase their Social Media Behaviour, which could result in more content being shared.

6.3.3 Social Media Behavior
Social Media Behaviour has been measured by users attitude, trust, self-disclosure and motivation towards Facebook. There seems to be a significant difference between Millennials’ and Non-Millennials’ attitude, trust, self-disclosure and motivation to use Facebook. Additionally it would seem that perceived security and privacy within different age groups has an influence on social media behaviour. If a user’s perceived security and privacy is high, their social media behaviour changes, in terms of a better attitude, more trust, and more motivation to use Facebook. This could mean that if Facebook would create an even better platform, where users have a better perception of their perceived privacy and security, it would change users social media behaviour and make their online experience even better.

I would recommend Facebook to take these results into account when improving their site, as these can be used to target different age groups individually. For example by showing more user specific content that this age group might enjoy. This can be seen in user motivation, as Millennials’ tend to use Facebook more for Entertainment purposes and Non-Millennials’ tend to be more focused on Socializing and Information seeking. Facebook could incorporate this by showing Millennials more “entertaining” content and recommendations. As well as create a better option to view “informative” content for Non-Millennial users. Therefore creating and sharing more content that consumer desire leading to a better experience for all users and could change their attitude towards Facebook in a positive way.

7. LIMITATIONS
This study is restricted by its limitations, which should be resolved and further observed by future research. In order to create more reliable results in all sections, I suggest creating a survey with a bigger sample size. Especially in terms of more participants for Non-Millennials’ as I had to create 3 different sub-samples of Millennials’ in order to get a more robust result. Another limitation to this research is that the participants within the Non-Millennials’ group have been 51+, with the oldest participant being 80. It is very likely that due to this large age span there might be some variations within this age group, since they can be seen as different sub groups of generations (Aksoy, van Riel et al. 2013). Furthermore the study did not include any users who have deleted their profiles, this could also be an interesting addition as to see what drove those users to quit. This should be handled with care as they might have a very biased (negative) perception towards Facebook. Moreover my Cronbachs alpha was in some sections rather low, by deleting some questions in order to adjust it I attempted to create a better score, this was not sufficient enough, especially within Perceived Privacy and Security. It is to note that I used questions from previous research and combined them (Yenisey, Ozok et al. 2005, Shin 2010) and the results presented within this research had a good Cronbachs alpha. This could be that I might have adjusted the questions too much, the sample size wasn’t big enough to be significant or that the mentioned papers had flaws in it. Further I would like to point out that I only focused on the perception of users and each individual might have different understandings of their perception. I treated all answers equally and didn’t treat users with a higher time spent on Facebook differently than a user with a low time on Facebook. This could have been an interesting addition as to see the perceptions of frequent users compared to minimal users. Additionally it is worth mentioning that this study focuses only on Facebook. It would be worth looking on new emerging platforms that might influence different age groups perception on privacy and security, since they seem to have an influence on social media behaviour and if this would also be the case for other platforms.

8. CONCLUSION
Considering the ever-changing world of OSN’s and it’s exponential growth of users, my study helps to understand Millennials’ and Non-Millennials’ perception on their privacy as well as security on these sites and how this influences their Social Media Behavior. Through empirical testing my study provides insight into how different age groups perceive their social media experience on Facebook and how this influences their social media behavior as well as their motivational factors to use Facebook. Perceived Privacy and Security play important roles in determining how people behave on Social Media sites and can help in the development for a better understanding as well as a better experience on those sites. It is of interest to examine the benefits of enhancing a user’s perception of their online privacy and security in order to increase their social media behavior. It is common assumption that users may be disinclined to use OSNs if they understood what their information was used for, however my results contradict this assumption, revealing value in user’s knowledge of their online activities and the associated risks.

9. AKNOWLEDGEMENT
I would like to sincerely thank my supervisor Raja Singaram for his constant support, advice and motivation throughout the whole process of writing my thesis. Further I would like to thank my fellow students with whom I created the survey and their input.

10. REFERENCES


Thank you for participating in this survey!

Please only fill in this survey if you are a Facebook user and 18 years or older.

1. What’s your nationality?
   - Dutch
   - German
   - Other (please fill in below)

2. What’s your age?
   - Age:

3. What’s your gender?
   - Male
   - Female

4. What’s your highest level of completed education?
   - Did not complete high school
   - High school
   - Trade / technical / vocational training
   - Some college
   - Bachelor’s degree
   - Master’s degree
   - Advanced graduate work or PhD.

PP1: I am confident that I know all the parties who collect the information I provide during the use of Facebook.
PP2: I am aware of the exact nature of information that will be collected during the use of Facebook.
PP3: I am not concerned that the information I submitted on Facebook could be misused.
PP4: I believe there is an effective mechanism to address any violation of the information I provide to Facebook.
PS1: I believe the information I provide with Facebook will not be manipulated by inappropriate parties.
PS2: I am confident that the private information I provide with Facebook will be secured.
PS3: I believe inappropriate parties may deliberately view the information I provide with Facebook.
PS4: I have adjusted my privacy settings on Facebook in order to make my post visible to a specific group of people.
PS5: I make use of the private group function of Facebook.

USE: How often do you use Facebook?
   - Less than once a week
   - Once a week
   - At least once a day
   - 11-20 times a day
   - More than 20 times a day

TIM: About how much time do you spend on Facebook a week?
   - 0-5 hours
   - 5-10 hours
   - 10-15 hours
   - 15-20 hours
   - 20+ hours

10.1 Appendices

You are being invited to participate in a research study. This survey is part of bachelor theses from students of the University of Twente.

The survey will take you approximately 5 minutes to complete. Your participation in this study is entirely voluntary and you can withdraw at any time. We ask you kindly to complete the whole survey.

By participating in this research study are no risks involved. Your answers in this survey will remain confidential.

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Russell, M. A. (2013). Mining the Social Web: Data Mining Facebook, Twitter, LinkedIn, Google+, GitHub, and More, O’Reilly Media, Inc.


DEV: On which devices do you use Facebook? You can give multiple answers.
- Desktop computer
- Laptop computer
- Smartphone
- Tablet
- Other (please fill in below)

ADD: Which of the following have you added to Facebook, even when it is not visible to all users? You can give multiple answers.
- Photographs of yourself
- Real name
- Hometown
- Email Address
- Phone number
- Relationship status
- Sexual orientation
- Work
- Religion
- Political preference
- Education

TR1: Facebook is a trustworthy social network.
TR2: I can count on Facebook to protect my privacy.
TR3: Facebook can be relied on to keep its promises
TR4: I never read Facebook’s privacy policies.

AT1: I would have positive feelings towards Facebook in general.
AT2: The thought of using Facebook is appealing to me.
AT3: Facebook has become part of my daily routine.
AT4: The facts that my posts on Facebook may be viewed by other individuals in my social environment influences my behavior on Facebook.

MV1: I use Facebook to get peer support from others.
MV2: I use Facebook to meet interesting people.
MV3: I use Facebook to feel like I belong to a community.
MV4: I use Facebook for instant messaging.
MV5: I use Facebook to stay in touch with people I know.
MV6: I use Facebook because it is entertaining and helps me relax.
MV7: I use Facebook because it helps me pass the time.
MV8: I use Facebook because I feel peer pressure to participate.
MV9: I use Facebook to get useful information about news/events.
MV10: I use Facebook to get useful information about product/services.

NEX: Do you have any negative experiences with Facebook? Please explain.

10.2 Tables

Table 5.1 Regression Table with Predictors, Nationality, Gender and Age

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude</td>
<td>.382*</td>
<td>.146</td>
<td>.117</td>
<td>1.00190</td>
</tr>
<tr>
<td>Trust</td>
<td>.288*</td>
<td>.083</td>
<td>.052</td>
<td>1.26150</td>
</tr>
<tr>
<td>Self-Disclosure</td>
<td>.500*</td>
<td>.250</td>
<td>.225</td>
<td>1.90276</td>
</tr>
<tr>
<td>Motivation</td>
<td>.354*</td>
<td>.125</td>
<td>.096</td>
<td>1.05139</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Nationality, Gender, Education, Age
Table 5.2 Coefficients with Dependent Variable, Attitude, Trust, Self-Disclosure and Motivation

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Dependent Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Attitude</td>
<td>(Control Variable)</td>
<td>3.77</td>
<td>.441</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>.015</td>
<td>.005</td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>.223</td>
<td>.188</td>
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<tr>
<td></td>
<td>Education</td>
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<td>.073</td>
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<tr>
<td></td>
<td>Nationality</td>
<td>.255</td>
<td>.180</td>
</tr>
<tr>
<td>Trust</td>
<td>(Control Variable)</td>
<td>2.596</td>
<td>.555</td>
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<tr>
<td></td>
<td>Age</td>
<td>.018</td>
<td>.007</td>
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<td></td>
<td>Gender</td>
<td>.270</td>
<td>.237</td>
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<tr>
<td></td>
<td>Education</td>
<td>.044</td>
<td>.092</td>
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<tr>
<td></td>
<td>Nationality</td>
<td>-.109</td>
<td>.227</td>
</tr>
<tr>
<td>Self-Disclosure</td>
<td>Age</td>
<td>.039</td>
<td>.101</td>
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<tr>
<td></td>
<td>Gender</td>
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<td>.358</td>
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<tr>
<td></td>
<td>Education</td>
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<tr>
<td></td>
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<td>Motivation</td>
<td>(Control Variable)</td>
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<td>Age</td>
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<tr>
<td></td>
<td>Education</td>
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<td>.077</td>
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<tr>
<td></td>
<td>Nationality</td>
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<td>.189</td>
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</table>

a. Dependent Variable: Attitude, Trust, Self-Disclosure, Motivation

Table 8.1 Descriptive for Motivation factors

<table>
<thead>
<tr>
<th>Descriptives</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<tr>
<td>Socialising</td>
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<td></td>
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<tr>
<td>Millennials</td>
<td>55</td>
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<td>1.19807</td>
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<tr>
<td>Millennials</td>
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<td>1.51968</td>
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<tr>
<td>4.00</td>
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<td>Entertainment</td>
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<tr>
<td>4.00</td>
<td>69</td>
<td>4.4855</td>
<td>1.47770</td>
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<tr>
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<td>1.49737</td>
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<tr>
<td>Selfseeking</td>
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<tr>
<td>Millennials</td>
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<td>2.2727</td>
<td>1.88025</td>
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<tr>
<td>4.00</td>
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Table 8.2: ANOVA for Motivation factors

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<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
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<tbody>
<tr>
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<td>Within Groups</td>
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<td>1,475</td>
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<td></td>
<td>Total</td>
<td>227,755</td>
<td>123</td>
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<tr>
<td>Information</td>
<td>Between Groups</td>
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<td>Within Groups</td>
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<tr>
<td></td>
<td>Total</td>
<td>422,651</td>
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