

**Ageing and Technology:
The internet practices of Dutch mediators in the digital era**

Master Thesis

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List of abbreviations

Abbreviations		Page of first appearance
CBS	Centraal Bureau voor de Statistiek [Central Agency for Statistics]	1
ICT	Information communication technology	2
US	United States of America	6
TAM	Technology Acceptance Model	13
PU	Perceived usefulness	14
PEU	Perceived ease of use	14
SNS	Social networking sites	18

1. Introduction

1.1. The aim of this thesis

In this thesis I will conduct a research about the internet usage and online preferences of Dutch adults between 45 and 64 years old. The adoption and acceptance of internet by older adults is subject to a large amount of research that has been done over the last two decades. Research regarding the internet usage of older adults often focus on the difficulties that older adults encounter when starting to use or aiming to learn how to use new technologies (Hanson, 2009). Various researches about older adults and their computing practices indicate that the process of ageing starts around the age of 45 and that therefore the specific needs and preferences of this age group should be taken into consideration when designing websites (Hawthorn, 2000; Duimel, 2007). Even though the process of aging is said to start around the of 45, people who are aged around 45, 50 and even up to 60, do not perceive themselves as ‘aged’ or ‘elderly’ anymore (Helsper, 2010). Having a lengthier life expectancy, having parents alive that are perceived to be ‘the older generation’ by their 50 year old children and being in a healthy condition at the age of 50 cause a shift in perception in terms of aging, growing older and being old. Being perceived as old or perceiving yourself as old influences the intention to use technology and to learn and master new forms of technology. A paradox for people aged 45 to 65 years old regarding ageism and technology emerges since this generation of people is perceived as old culturally, socially and academically, even though they are still active in the workforce, are in a healthy condition and are caretakers of their older parents and therefore willing and sometimes forced to learn how to use new technologies. Looking at the current lifestyle of Dutch middle aged adults and the way in which technology is of growing importance nowadays, Dutch middle aged adults could have a different way of employing internet and new technologies and implementing these in their daily lives. This thesis aims to explore and explain the nature of computing practices by Dutch ageing adults between 45 and 65 and their specific digital needs, motivations and preferences when going online and engaging in online activities. The insights and results in this thesis will be retrieved from a study based on the following research question:

“Do Dutch mediors have inherently different behaviours, needs and perceptions when making use of the internet than digital natives or older internet users in this information and social media age?”

1.2. Introducing the older Internet users

Together with many other Western countries and societies, the Netherlands is experiencing an increase in the average age of their population (OECD, 2006). As can be seen in the latest graph of the Dutch CBS (Central Agency for Statistics), the population between the age of forty and sixty-five exceeds all the other age groups in the pyramid (‘Leeftijdsopbouw Nederland 2013 [Dutch population

according to age 2013]; n.d.). People are growing older and keep having an active lifestyle on an older age, making them the fastest growing part of the population when it comes to computer and internet usage (Hart, Chaparro & Halcomb, 2008). Older adults increasingly make use of the internet to facilitate them in various services and business such as banking, online shopping, leisure time and recreation and travels (Vuori & Holmlund-Rytkönen, 2005; 'ICT, kennis en economie', 2011).

1.2.1. Growing importance of technology

Over the last decade or so, technology has become an important part of everyday life and the use of technology is an integral component of daily activities (Czaja, Charness, Fisk, Hertzog, Nair, Rogers & Sharit, 2006). A successful adoption of technology is currently increasingly important to function independently. Also in the lives of older adults, the use of technology, computer and internet usage starts to have a more prominent place, (Wagner, Hassanein & Head, 2010). Now that the use of technology is becoming more dominant in the everyday lives of people, people who are anxious about using technology or about learning how to use new products and techniques risk the chance of falling behind in society and become disadvantaged in various social environment such as the workforce, the health care arena en social networks (Czaja et al., 2006).

1.2.2. Ageing and technology

The process of ageing is often measured by someone's chronological age, the number of years someone has lived since the day he or she was born (Stuart-Hamilton, 2012). And even though the chronological age might be a misleading number, since people of the same age differ extremely in characteristics, preferences, experiences and values, the social age of people is often a combination of specific behaviour in relation to someone's chronological age (Stuart-Hamilton, 2012). Elderly are therefore in general not expected to play in the streets with skateboards and youngsters are not expected to walk around using walking sticks. Insuperable, having a certain chronological age comes with social expectations and qualifications. Research studying the relation between computer and internet use and age often show that computer and internet use are negatively related to age, meaning that the number of users declines when the users grow older (Czaja et al., 2006). Often, older people are said to be uncomfortable with technological developments and to avoid the adoption of new technologies (Vuori & Holmlund-Rytkönen, 2005). There are various reasons why computer technology and internet are not easily adopted by people above the age of 50 (Hart, Chaparro & Halcomb, 2008). Older adults might have a fear for technology, little exposure to computer technology and might be not aware of the benefits computer technology and the Internet offer (Hart et al., 2008). Furthermore, various studies reveal that older internet users might experience both physical and psychological disadvantages when using the internet such as cognitive decline and problems with memory, learning new tasks and information processing and physical declines such as problems with dexterity, vision or hearing (Charness, Kelley, Bosman & Mottram, 2001; Czaja et al., 2006; Sharit, Czaja, Hernandez, Yang, Perdomo, Lewis et al., 2004; Bitterman & Shalev, 2004; Charness & Holley,

2004). Many researches from approximately two decades ago indicate that people over the age of 50 are set with the way their lives have developed and are less positive about their future purpose in life making them less interested in learning how to use new technologies, compared to their younger counterparts (Szmigin & Carrigan, 2000). However, the assumption that older people are resistant to change and wouldn't be willing to try new products and services, such as new media and new technologies could say more about the cultural attitude towards older people in general than it says about the actual attitude of older people justified by reliable evidence (Szmigin & Carrigan, 2000). To what extent older adults are perceived and perceive themselves as (too) old influences their ability to learn new attitudes and behaviour (Hawthorn, 2007). Since older adults in general are not considered as early adaptors of new products or technologies, this influences the way in which they approach new technologies and are approached by marketers of new technologies (Hanson, 2009). Older users are perceived as more anxious to start using the computer and the internet and might have a greater fear of failing, because of their age and their lack of experience. However, ICT, computer and internet technologies are of growing importance in people's everyday lives, both private and in the working force, also among older adults (Wagner et al., 2010). Especially among the middle aged people between 44 and 65 years old the digital divide is expected to diminish since they are still active in the work force and possibly living together with their children who are digital natives, therefore being more familiar with new media's and technologies, their usability and their benefits.

1.2.3. The 'young' elderly

Empirical evidence exists stating that physical and cognitive declines begin around the age of forty-five to fifty years old, meaning that this age could be seen as a natural divide between 'young' and 'old' adults (Hanson, 2009; Wagner et al., 2010). However, it is not to say that people around the age of fifty show similar internet behaviour or have the same digital needs as people around the age of seventy-five or eighty (Hanson, 2009). Much research studying the computer practices of older adults focus only on the age of the participants, lacking further segmentation of the research sample based on financial status, life stage, experiences and values (Vuori & Holmlund-Rytkönen, 2005). Many adults above the age of 50 years old are still active in the workforce and are therefore used to computers and internet to perform their jobs on a daily basis (Wagner et al., 2010). This can also be seen in the various graphs Duimel (2007) provides in her research, showing that the level of computer ownership and the level of Internet access among people between 50 and 64 years old develop almost in a similar pace as the total Internet population, meaning that the levels of computer and internet penetration among middle aged adults are similar to the levels of computer and internet penetration of the total Dutch population. In the same graphs it can be seen that the level of computer and internet penetration among older age categories (65 – 74 years old and 75 years old and up), also increases but at a much slower pace. It could therefore be expected that the older part of the population will reach a high level of computer ownership and internet access penetration, only a decade or two later than the

younger generations do (Van Dijk, De Haan & Rijken, 2000). The same is stated by Hart et al. (2008), who claim that the technological divide in the US might diminish once the ‘baby boomers’ enter the older age categories. However, even though various researchers claim that the lag of computer ownership and internet access of the older population might only be temporary, very little research is done about the way older and middle aged adults adopt new media in their lives nowadays. Especially the age category of adults between 50 and 65 years old, who are active in the current workforce and who probably live together with younger children/teenagers who are active online, might be expected to be familiar with the use of internet and could even be confident internet users, contrary to what earlier research is stating (Wagner et al., 2010; Duimel, 2007). It is stated by Watermann (2011) that most older adults are willing to go online and to use the Internet but that websites are often not designed with the needs and preferences of this group in mind, therefore not appealing to their digital needs and online behaviour (Watermann, 2011). Besides that, the older generation is often by-passed in the history of technology and Internet marketing and information, which has been primarily targeted at the younger generation of users who was expected to be the most significant market (Hart et al., 2008). However at this moment older adults are becoming prevalent demographically and economically, making them the primary client group in almost all product and service groups with approximately less than 10 per cent of marketing expenses spent on them (Tréguer and Ségati, 2005 in Thébault, Picard and Ouedraogo, 2013).

1.2.4. Dutch mediors: Adults between the age of 45 and 65 years old

This study begins by building a profile of the Dutch adults between 45 and 65 years old, its online activities and its motivations to go online and use the internet. First of all, I find it important to find an academic term that describes the target group of this research. In earlier research about older adults and the use of Internet, the term ‘baby boomers’ is often used to describe the group of older adults between the age of 55 and 65. However, the term ‘baby boomers’ refers to people who were born right after World War II ended, between 1945 and 1947 (Maarseveen & Harmsen, 2011). This group of older adults already reached the age of 65 and is therefore not a part of my research. In this study I will focus on the term ‘medior’ to address the target group. The term ‘medior’ refers to the generation of people who cannot be called junior anymore but are not old enough yet to be called senior either (‘Medior, waar staat de term voor?’ [‘Medior, what does it say?’], 2011). Often people within the age group of 45-65 years old do feel that they are too young to be called senior and they felt that there wasn’t an accurate term for their specific age group (‘Medior, waar staat de term voor?’ [‘Medior, what does it say?’], 2011). The term medior was chosen in online and telephonic surveys by over a thousand Dutch visitors of the website ‘seniorstartpagina.nl’ [seniorstartingpage.nl]. Unfortunately, no academic definition of this term was found during my research.

1.3. Introducing the research methods

A profile of the Dutch mediors, including their overall interests, online interests and online practices will be used to identify the gaps in academic literature and marketing theories when it comes to targeting this specific group. An extensive literature review will be done in order to learn more about this target group of Dutch older internet users between 45 and 65 years old and to see which gaps in academic research and literature need to be filled in further. An online survey will be used as a quantitative research method to collect more information about the digital needs and Internet practices of Dutch mediors in general, in order to find more information on possible patterns that appear among this group. Furthermore three focus groups will be organized to search for more in-depth information about the digital preferences of Dutch mediors. The focus groups will be divided into a men, women and mixed gender group to identify possible gender differences when it comes to internet use and online preferences. The information and data collected using both a qualitative and quantitative research method will be used to draw conclusions from, provide new academic insights and implications for further research and give practical implications and advice to the Dutch online magazine WelkomLife (www.welkomlife.nl), an online magazine aiming to provide Dutch mediors with an online platform that appeals to their digital needs and preferences and informs them with content that fits their current stage of life.

1.4. The relevance of this study

The aim of this study is to fill and complete the gaps that exist in academic research and marketing research about how to serve older adults between 45 and 65 years old on the internet and to explore the digital needs and preferences of this age group. This study is therefore both academically and socially relevant.

1.4.1. Academic relevance

When researching older adults as internet users, one should first identify which group of older internet users one is studying. The age of fifty or fifty-five is in many academic researches chosen as the age to define the older internet users (Hanson, 2009). Even though the age of 50 could be seen as a natural divide between young and old, it is not to say that people aged 50 feel and behave similar as people around the age of 80 (Hanson, 2009). It is therefore of great importance to carefully define the age of research participants, together with their current life stage, experiences and abilities. Often internet users around the age of fifty are placed in the same category as baby boomers and retired internet users, who only use the internet in their free time, when it comes to studying internet behaviour. However, nowadays people around the age of fifty are often still active in the workforce and therefore encounter the use of computer and the internet not only in their free time but also because it is required when they want to execute their jobs right (Wagner et al., 2010). It might therefore be the case that the internet practices and digital needs are different for adults between 45 and 65 years old than they are for adults above the age 65. According to Vuori and Holmlund-

Rytkönen (2005) many questions about the internet practices and the online behaviour of older adults remain unanswered and unexplored and therefore this study aims to build on old knowledge that exists about senior internet users and explore whether these assumptions are still true for the middle aged generation of internet users between 45 and 65 years old nowadays. Furthermore it is noticed that much of the research about the internet practices of people aged 45 and up is done in the US and therefore highly focused on the American population and the American way of life. It might be interesting to see whether cultural differences in online behaviour, perceptions, motivations and digital needs emerge when studying another research sample than the American.

1.4.2. Social relevance

Not only in academic research a poor divide between various older internet users is made, also in the marketing and web design industries there is a lack of knowledge about the digital needs and preferences of older adults (Vuori et al., 2005; Hart et al., 2008; Hanson, 2009). For years, technology and internet marketing have been focussing on the younger generation, since this was expected to be the primary market for these products (Hart et al, 2008). However, over the past few years, adults around the age of 50 started living a more active and independent lifestyle, executing more activities and having more purchasing power (Hart et al., 2008). Being the largest and most wealthy part of the population in the Netherlands at this time, it is about time that marketers and web designers start to take this group seriously ('ICT, kennis en economie', 2011). Marketers and web designers will have to understand the practical guidelines and usability norms that appeal to the older users above 50, together with some content marketing that fits the stage of life of the group of people between 50 and 64 years old (Hart et al, 2008; Thébault et al, 2013; Hanson, 2009; Vuori, 2005). This studies aims to reveal specific preferences and needs of this target group regarding content and usability when it comes to using the internet.

1.5. Sub questions and operationalization of the terms

In order to make clear in which direction this research will be heading, a central research question and some sub questions have been developed. The central question is focused on the online behaviour, digital needs and preferences of Dutch mediors when using the internet. Even though it is commonly known and accepted that older internet users have other needs and preferences when going online than young internet users do, not many webpages on the internet are designed with these needs and preferences in mind (Hanson, 2009). In marketing practices in the field of technology, the older users have often been bypassed over the last decades, since their younger counterparts were expected to be the most significant market in this field (Hart et al., 2010). Even though being perceived as old or perceiving yourself as old influences the use or intention to use technology, the perception of age is changing. Now that the growing economic power, the generally healthy condition and the active lifestyle of adults between the age of 45 and 65 are becoming more well-known and are starting to receive more attention in the field of academic research it is time to explore the characteristics in the

behaviour, needs and preferences of this target group of middle aged adults. Age in this study is constructed as the extent to which people feel that their chronological age corresponds with their bio-physical and psychosocial age (Ryu, Kim & Lee, 2008). Bio-physical age in this case is related to changes in the physical and cognitive capabilities that naturally come with aging and psychosocial age is related to social qualifications that come with a certain chronological age and certain life events such as (early) retirement or becoming grandparents (Ryu et al., 2008). As stated by Stuart-Hamilton (2012) psychosocial or social age is related to how people feel like they or someone of a specific age should behave based on the chronological age someone has. Online behaviour of Dutch mediors is defined as the actions and tasks that they execute when going online, measured by self-reported data in an online survey and focus groups. Since significant differences are found between hedonic and utilitarian use of the internet when looking at activities as online shopping and searching for information, special attention will be paid to this (Wang, 2010; Scarpi, 2012). Helsper (2010) states that young internet users have a more social and leisurely approach towards internet use than do middle and older aged internet users. Digital needs are defined as the necessities of Dutch mediors when using the internet and are also measured by self-reported data in an online survey and partly by focus groups. Digital needs are related to the usability of webpages and the content that is available online. Preferences of the Dutch mediors when going online are defined as the content that users wish to find when going online or the tasks and actions they freely choose to perform online. The central research question of this study is supported by various sub questions in order to narrow down the scope of the research and give direction to the exploration of the data. The first sub question that is studied focuses on the actual behaviour of Dutch mediors when they use the internet. Based on the information that was found in the literature it can be stated that older internet users execute less tasks online and behave differently from their younger counterparts (Haddon, 2000; Weatherall, 2000; Vuori & Rytönen-Holmlund, 2005; Duimel, 2007). Especially the number of task executed online is said to decrease when internet users are older. By retrieving self-reported data in online surveys and qualitative data in focus groups the actual online behaviour and possible patterns in the online behaviour of Dutch mediors will be measured. Of special interest are the most popular search topics among Dutch mediors retrieved from earlier research, the way and frequency Dutch mediors communicate online and whether they communicate online with strangers and how reliable information from strangers online is perceived. When looking at studies who compare the nature of computer practices of digital natives to ICT's users of the second generation (44 to 65 years old) it can be seen that younger internet users and old and retired internet users tend to have a more leisurely approach towards internet use, whereas internet users of the second generation tend to have a more practical approach (Duimel, 2007; Helsper, 2010). General patterns in online behaviour and activities will be categorised based on hedonic internet use and utilitarian internet use. The first sub question in this research is therefore as follows:

1. What are the most common activities of Dutch mediors online?

After indicating various general patterns about the online behaviour of Dutch mediors, the focus groups research method will be employed to fill in gaps and answer questions that arise after analysing the quantitative data. The information retrieved from the focus groups will give more in depth information about the digital needs and preferences of Dutch mediors, their views on utilitarian and hedonic use of the internet and their perceptions regarding the use of internet, new media and social media technologies in the current information age. The second sub question is:

2. What is the range of perceptions, digital needs and desires of Dutch mediors when making use of the internet?

In general, men are expected to be more attracted to innovations and new technologies compared to women and various studies show that men in general outnumber women in usage rates (Duimel, 2007; Pan & Jordan-Marsh, 2010). Also when it comes to having internet access and using the internet, differences in usage and behaviour online are influenced by gender. Empirical research by Duimel (2007) shows that men in general can be considered as early adaptors of the internet compared to women, that they are often more experienced in computer and internet use than are women and therefore execute more tasks and actions online when using the internet than do women. A study by Pan and Jordan-Marsh (2010) about the internet usage of Chinese older adults revealed, in accordance with earlier research, that gender differences are positively correlated to age, meaning that gender differences are stronger for older age groups. Besides gender differences in the level of internet experience and capabilities when using the computer, men and women show differences regarding the tasks they execute online. According to Duimel (2007) men seem to have a more practical approach towards internet use compared to women. Women are more often involved in entertaining activities such as chatting with friends and relatives on MSN and playing games, even though online gaming is considered a male-dominated activity (Duimel, 2007; Helsper, 2010). An activity that is typically related to women is searching for information about health and healthcare, whereas searching for sexual material is highly men dominated (Helsper, 2010). By organizing focus groups in which only men, only women or a mix of men and women participates I am hoping to explore and explain some of these gender differences and see to what extent certain gender differences are expressed or might not be expressed among Dutch mediors. The last sub question of this study is as follows:

3. To what extent differ Dutch men and women between the age of 45 and 65 in their online behaviour, digital needs, preferences and perceptions and how can these differences be explained?

2. Theoretical framework

Over the last couple of years, many western countries have experienced an increase in the average age of the population (OECD, 2006). With the majority of the population growing older, the number of computer and internet users is increasing with it (Wagner, Hassanein, Head, 2010). Over the last two decades, a large amount of research has been done about the computer and internet use of the older part of the population. The scope of many of these researches lies somewhere between the competences of the older computer users and the level of adopting these new forms of technologies into their daily lives. Over the years it is argued in general that older adults or seniors encountered various difficulties when using the computer or the internet. Physical decline such as hearing problems, decline in vision and difficulties in locomotion are considered to influence the ease of use of these new technologies. Furthermore cognitive decline, such as changes in the fluid intelligence (the ability to learn new tasks and cope with new information) and experiencing problems with short term memory, are expected to make it difficult for seniors to adapt to those new technologies (Wagner et al., 2010). Earlier research shows that the adoption of new media technologies is often negatively correlated with having an older age. In this part of the thesis will be discussed what is currently known about the online behaviour and adoption of internet and new media by older adults and whether this also applies to the second generation of internet users, the middle aged adults.

2.1 Being old or feeling old?

Often it is the case that growing older or having an older age is related to various psycholosses or decline in physics and cognitive abilities and health (Bond, 2004). The later or second part of life, when people are reaching an older age and may encounter such forms of decline is therefore often qualified as a period of decline in the quality of life (Bond, 2004). Earlier research states that people who have become 50 or older are set with the way their lives have developed and might feel reluctant to experimenting with new products, services or technologies (Szmigin & Carrigan, 2000). A study by Carol Ryff (1991) indicates that over twenty years ago middle aged and older aged people were significantly less positive about their purpose in life, compared to younger aged people. The purpose in life in this research is defined as the level to which the participant feels like he has goals in life and has some sense of directedness, which gives him aims and objectives for living. Middle aged people reported a stable sense of their purpose in life, meaning that they do not foresee future increases or decreases that influence their purpose in life. Older people however, rate their past assessments significantly higher than their present or future assessments, indicating a significant decrement for the future years. Furthermore this research revealed that older people are significantly less positive about their level of personal growth. Personal growth in this research is defined as the ability to improve the self, to develop in new attitudes and behaviour and to feel continued development. Older aged people reported to recall high levels of personal growth in the past but are expecting low levels of personal growth in the future, looking at the regression in personal growth from the past to the present. It is

interesting to see that middle aged people expect to maintain the present level of personal growth, meaning that they do not expect a certain level of regression as the older aged people are indicating. This could be explained by their relatively young age compared to the older aged group, which could make them unfamiliar with a decrease in personal growth. Ryff (1991) claims that similar findings were found in comparable studies and that these findings could partially be explained by the prediction that with growing older, individuals develop a closer fit between the ideal self and the actual self-perception.

It is important to note that even though the findings in the study by Ryff (1991) might be similar to findings in various other research conducted around that time, these results are highly dominated by the western society. A recent study by Karasawa, Curhan, Markus, Kitayama, Dienberg Love, Radler and Ryff (2011) explores the influence of cultural differences regarding the perception of age by comparing the perceived level of well-being of Japanese older adults and American older adults. Karasawa et al., (2011) decided to compare those two cultures because the Japanese culture in general has a more positive attitude towards growing older than does the American culture. The Japanese culture is a highly collectivistic culture, which means that the focus in this culture lies mainly on the perception of the self in a collectivistic context, in which interrelations are important. Older people in Japan are viewed as socially valuable, as wise persons who are enjoying a phase of 'rebirth', after the busy period of working and raising children. In the highly individualistic American culture on the contrary, the focus often lies on active engagements and individual achievements in for example work or sports. Moving away from active engagements and starting to depend on others is often seen as negative development in this culture. Results of this study show that culture indeed does influence the perception of age of older people. With supportive means and services for the elderly, Japan seems to offer a personal growth-producing context for its elderly, compared to the cultural circumstances in the US. Perception of age and growing old is thus influenced by the way society deals with the elderly and the process of growing older. Nevertheless older people in both countries report significantly lower scores regarding purpose in life, compared to younger counterparts, meaning that even when researched internationally living a purposeful and meaningful life is challenging for the elderly among us (Karasawa et al., 2011). In this thesis it is researched how Dutch mediors perceive themselves and their current age in relation to the Dutch culture and society in nowadays' information and digital era. With cultural differences regarding elderly between Western and Eastern cultures revealed in earlier research it might be interesting to see how the perception of their current age and life stage influences the online behaviour, needs and motivations of Dutch mediors, since the Dutch culture is different from both the Japanese and the American culture when it comes to growing old and becoming needy, ill or disabled. Unlike in Japan or the USA the Dutch healthcare system and system of social security provide the Dutch with the needed care or financial assistance when growing old or becoming ill or disabled. In this study it will be explored whether or not Dutch mediors show specific behaviour or have particular digital needs and perceptions that can be related to the Dutch culture and society.

It is seen as a paradox that even when older people are experiencing a decline in both cognitive and physical abilities when ageing, they still perceive the quality of their life as satisfactory (Hansen & Slagsvold, 2012). Hansen and Slagsvold (2012) studied this paradox of subjective well-being among older people to get a more nuanced understanding of this concept in the second half of life. Also in this study it is concluded that a high level of subjective well-being among elderly is often the result of adaption to certain situations, emotional regulation because of experiences in life and accommodative strategies, meaning that older adults rescale their goals and adjust their aspirations to the given situation (Hansen & Slagsvold, 2012). According to Bond (2004), who wrote a book about the perception of the quality of life, the perceived quality of life especially among older people is often more dominantly shaped by the positive assets in their lives. Health problems, decline in physics and less strong cognitive abilities are expected to happen when people grow older and are therefore often not taken into consideration when older people examine their quality of life. The perceived quality of life is, as stated by Bond (2004), part of the process of the life cycle and therefore continually subject to change. New experiences, positive or negative, cause people to review their norms and values and decide how these new experiences influence their attitudes and behaviour. It might be therefore often wrongly assumed that older people are resistant to change, especially when considering new technologies.

Szmigin and Carrigan (2000) state that the assumption of older people being resistant to change and not willing to try new technologies might say more about the cultural attitude towards older people in general than it says about the attitudes of older people, justified by reliable evidence. One field in which the general cultural attitude of western societies towards older people can be viewed is the field of marketing (Szmigin & Carrigan, 2000). For decades the market of people aged 50 and up has been considered as one existing out of 'empty-nesters', widowers and widows, not receiving any attention from the marketers because of their expected lack of buying power and their expected hesitation to try new products or brands (Silvers, 1997 in Szmigin & Carrigan, 2000). For a long time these group of consumers has only been associated with a limited range of services in the fields of medicinal, financial or disability products. Whenever marketers sporadically leave their comfort zone of targeting the young and active consumer groups and relate to an older consumer group in their advertisement, those ads often target the older adults in a negative or stereotyping manner (Peterson, 1992 in Szmigin & Carrigan, 2000). Szmigin and Carrigan (2000) claim that advertisers are often feared to target the older consumers or to portray older models in their advertisement because it might scare off the younger population. Similar assumptions are made in an article by Hart et al. (2008) in which it is indicated that the population of older people was often bypassed in the marketing and information services about new technologies because the younger generation was originally expected to be the significant market. Nevertheless, a research by Szmigin and Carrigan (2000) that was conducted over a decade ago, already identified back then a group of cognitively young and innovative consumers who, regardless of their older age, were socially up-

market and actively interested in luxury product categories such as leisure and tourism and also indicated a willingness to try new offerings. Due to the growing economic power, the increase of the older population in general and their changing, more active lifestyle, more technological products and services are now marketed at the senior users of the market (Hart et al., 2008). A lengthier life expectancy for older people can be associated with a change in living conditions, both in physical as in cognitive conditions (Thébault et al., 2013). It is found to be true that more and more companies, besides health and financial services, are discovering the growing purchase power and the changing active lifestyle of older adults (Vuori & Holmlund-Rytkönen, 2005). Unfortunately, still very little is known about the specific values and attitudes of people aged 50 and up and how this influences their behaviour. It is therefore a common mistake that marketers often treat all the older consumers as one homogeneous market, not differentiating in terms of age, life stage and financial status (Vuori & Holmlund-Rytkönen, 2005). For example, it is safe to say that people who are around 50 would deny to be similar to people who around the age of 80 (Hanson, 2009). Making it very important, according to Hanson (2009), to carefully define the term 'older adults' when researching this part of the population. This study aims to make explicit whether the online behaviour, digital needs and perceptions of Dutch mediors differ from younger or older aged internet users by exploring and explaining typical aspects of their online behaviour, digital needs and perceptions. It will be interesting to learn how Dutch mediors behold the use of internet and social media in their daily lives and to what extent they feel attracted or rejected by online services and internet marketing tools.

2.2. Older adults adopting new technologies

Many researches about the web browsing behaviours of older internet users, automatically start by listing all physical and cognitive difficulties that older people encounter when using new technologies or when learning new behaviour (Hanson, 2009). Older adults are either not taken into consideration when researching the internet usage of a population or are researched separately, resulting in findings that show that older adults use less forms of technologies and also use it far less often than the younger population, leaving researchers assuming that older adults fail to use these new technologies instead of believing that these users have a different approach of using these technologies (Cutler, 2005; Leo, 2010 in Milliken, O'Donnel, Gibson & Daniels, 2012; Milliken et al., 2012). The general stereotypical view of older adults being technologically inadequate is one strong and deeply rooted opinion for years now (Broady, Chan & Caputi, 2010). The older generations are in general not considered as early adopters of new media and technologies (Hanson, 2009). According to Timmerman (1998 in Broady et al., 2010) many older adults feel like they are too old to learn how to use the computer even before they have actually tried to use it. This was also noticed by Hawthorn (2007) who studied the learning behaviour of older adults in beginners' computer classes. Even before starting the course, the tutors of the course were unwilling to slow down the teaching speed in order to adapt to the needs of the older students, based on the assumption that those student were too old and

therefore lacked the ability to learn new behaviour. Leaving the older students to believe that these assumptions were true, demotivating them from learning how to use the computer (Hawthorn, 2007). Nevertheless, Menchin (1989 in Vuori & Holmlund-Rytkönen, 2005) already claimed years ago that older adults do have the ability to master the complexities of technological equipment, as long as they have the ability to learn at their own pace. Even though older people are often viewed as resistant to change and not interested in learning new behaviour and attitudes, especially when it comes to new media and technology, older people do not share this view of themselves (Cutler, 2005). According to Cutler (2005) older people do make use of the new forms of media and technology in their own ways, affecting not only the way media and technology are designed but also how they are adopted and adapted into the daily lives of the older users. Not being born as digital natives but being described as internet users of the second generation, this research will explore how competent Dutch mediators perceive themselves when using internet technologies, when learning how to use these technologies and when keeping up with the on-going developments. Those perceptions may differ from older internet users or from the same generation from a decade ago, since internet technology is currently more present in people's everyday lives.

According to Van Eijck, Knulst and Van Rees (2001) older adults rely strongly on the media technologies that they adopted during their youth, explaining why they adopt new media such as computers and internet at a much lower pace compared to the current youth. Sackmann and Weymann (1994 in Nägle & Schmidt, 2012) introduce the concept of technology-generation, meaning that every age cohort or generation is strongly tied to a certain form of technology that was highly present during their twenties. This means that the part of the population that is about twenty years old when a new form of technology is being explored, will be the first group to accept and adopt this technology in their daily lives. All other age groups will follow at a slower pace, with the older age groups following at the lowest pace. With these developments in mind and looking at the fact that the internet access for consumers was introduced over fifteen years ago in the Netherlands, it might not be surprising that the amount of households with internet access almost reached a level of saturation in 2010 ('ICT, kennis en economie', 2011). Also in the US it is expected that the technological divide will diminish when the 'babyboomers' will become a part of the older population (Hart, Chaporro & Halcomb, 2008).

2.2.1. Technology Acceptance Model (Davis, 1989)

Besides having the opportunity to learn how to use the internet and other new forms of technology at their own pace and in their own ways, people in general will have to understand the benefits of a new product or technology before they will start an attempt to master the use of it (Menchin, 1989 in Vuori & Holmlund-Rytkönen, 2005; Pan & Jordan-Marsh, 2010). A theory that was initially developed to examine the technology adoption and the user behaviour of new technologies, based on Fishbein and Ajzen's (1975) theory of reasoned action, is the theory of the Technology Acceptance Model (TAM) by Davis (1989). According to Davis (1989) the usage of new

technologies is determined by the level of perceived usefulness and perceived ease of use of the consumer (Pan & Jordan-Marsh, 2010). In a research by Pan and Jordan-Marsh (2010) about the internet adoption of Chinese older adults, 'perceived usefulness' (PU) is defined as the level to which the consumer believes that the usage of this form of technology will enhance or improve his performance. 'Perceived ease of use' (PEU) is in this research defined as the extent to which the consumer believes that the usage of specific form of technology will be free of effort (Pan & Jordan-Marsh, 2010). Based on the existing literature, Pan and Jordan-Marsh (2010) expect that both PU and PEU will have a positive effect on the internet adoption and the intention to use the internet of Chinese older adults. The study reveals that PU has a direct positive effect on both the internet adoption and the intention to use the internet. This is similar to what is found in the study by Vuori and Holmlund-Rytkönen (2005) about the digital needs and wants of Finnish older adults when using the internet. In this research the participants stated that the internet offered them a more comfortable and easier life independently of time and location, which enhanced their motivation to use the internet. PEU also has a positive effect on internet adoption, however the effect of PEU on use intention is difficult to predict since this effect is influenced by the level of PU and is therefore an indirect effect. An interesting result found in this research, besides the effects of PU and PEU on both internet adoption and internet use intention, is the age difference among the Chinese elderly. The researchers discovered that the 'young' elderly, people between the age of 50 and 60 years old, had 2.31 greater odds to be using the internet than elderly aged over 60 (Pan & Jordan-Marsh, 2010). Furthermore, PEU had a much stronger influence on internet use adoption for older seniors than for younger seniors. The researchers explain this by stating that the young Chinese seniors are often familiar with the use and the benefits of computers and internet, because they have just left the work force or are still active in the work field in which the use of computers and internet is more common. Besides being experienced in using the internet, they are aware of the opportunities the internet offers them to meet their needs and wants in entertainment, information services and a social network (Pan & Jordan-Marsh, 2010). In this study the TAM will function as a guideline to examine to what extent PU and PEU influence the internet use and online behaviour of Dutch mediors, especially since the results in the earlier study by Pan and Jordan-Marsh (2010) revealed such a difference between 'young' older adults and the 'old' older adults regarding the influence of PU and PEU on internet use and internet adoption.

2.3. Defining the target group: Older adults online

In this research the focus will be on the internet use of the 'young elderly', primarily on the Dutch internet users between 50 and 60 years old. According to forecasts by the Dutch CBS this part of the population is expected to grow to up to 2,7 million consumers within the next couple of years (CBS, 2011). When also looking at the secondary target group of this research, the young elderly between 45 and 65 years old, this number is expected to rise to a number of approximately 5 million consumers (CBS, 2011). Besides being the largest age cohort in the Netherlands in the coming years,

this generation is also the wealthiest generation in this country. With this generation having the highest spendable income and the largest amount of capital in the country compared to both older and younger cohorts, this generation will become highly important both demographically and economically and can soon be seen as the primary client in a large number of product groups and services (Ségati & Tréguer, 2005 in Thébault, Picard & Ouedraogo, 2013). As stated before, the older generation is having a more active lifestyle, having growing economic power and being the largest age cohort in the country is noticed by more and more companies other than just healthcare companies (Vuori & Holmlund-Rytkönen, 2005). An increasing number of tools, services and products is being marketed to seniors (Hart et al., 2008). Contrary to the overall stereotypical opinion about older people, they are increasingly buying luxury products such as cars, vacations and alcohol (Baxter, 1999 in Szmigin & Carrigan, 2000). Baby boomers, an often used term to describe this generation of young elderly in earlier research, are mostly known for their relatively high incomes, their small households and house ownership (Moore, 2012). A sample of 1,121 American baby boomers shows that they often live in a household with two people or less, because a lot of them are empty nesters and that nineteen per cent of them earns an annual income above one hundred thousand dollars (Moore, 2012). Research by the American Pew Research Centre shows that the level of Internet usage by baby boomers increased a lot over the last decade (Raine, 2010). In fact, this generation baby boomers is said to be the largest growing population online (Waterman, 2011). Baby boomers are found to be open-minded and willing to experiment with new products and technologies (Bernstein, 2001 in Yang & Jolly, 2008). Moreover, baby boomers do not perceive themselves as too old to learn and adapt technology based products and services into their daily routine (Bernstein, 2001).

The age of the baby boomers-generation is 'moving' and therefore this term will not be applicable anymore to this specific age cohort within five or ten years. In this study I will therefore use the term 'medior' to address the target group. The term 'medior' refers to the group of people who cannot be called junior anymore but are not old enough yet to be called senior either ('Medior, waar staat de term voor?' ['Medior, what does it say?'], 2011). Often people within the age group of 45-65 years old do feel that they are too young to be called senior and they indicated that there wasn't an accurate term to identify their specific age group ('Medior, waar staat de term voor?', 2011). The term medior was chosen in online and telephonic surveys by over a thousand Dutch visitors of the website 'seniorstartpagina.nl' [seniorstartingpage.nl]. Unfortunately, no academic definition of this term was found during my research. However, both some recent and earlier researches have claimed that a more detailed definition of the term older adults, would improve the research results. Haddon (2000) proposed to pay more attention to the developments in internet use of 'younger elderly' when researching the internet use of older adults, since they are more likely to use the internet looking at their experience with the internet and computers both in work as in private situations. Also in a study by Czaja et al. (2006) a different approach towards older users of technology was found. In this research, participants between the age of 40 years old and 59 years old are called 'the middle aged',

meaning that everyone aged 60 and up is considered as 'old'. As stated earlier, research by Pan and Jordan-Marsh (2010) about the internet use of the Chinese elderly found a clear difference between the internet use of the 'young' elderly compared to the 'older' elderly, indicating that further research should be looking into the various approaches these two generations have towards the internet and other new technologies.

2.4. Online behaviour and internet activities

In general, the activities that are executed on the internet can be divided into two different categories. Internet users either have a utilitarian or a hedonic approach when going online (Wang, 2010). When internet users are goal orientated when going online and internet activities are perceived as necessary tasks with instrumental means to an end, the internet use has a highly utilitarian value. Websites appealing to the utilitarian needs of the internet users are often efficiently orientated and aim to solve certain problems, give directions or provide the users with information or products (Wang, 2010). The use of utilitarian orientated websites often fulfils goals that are external to the interaction between the website and the internet consumer (Massey, Khatri & Montoya-Weiss, 2007). The use of hedonic websites, on the other hand, aims to fulfil goals that are internal to the interactions between the internet consumer and the website such as enjoyment from playing a game on a website or watching a movie or television online (Massey et al., 2007). Websites with a hedonic objective aim to provide the consumer of the website with a pleasurable experience while browsing the website, with fun and playfulness being highly valued (Scarpi, 2011). In this study the utilitarian approach of internet use is related to a highly practical approach of online browsing, while the more hedonic approach is related to social and leisurely values and approaches. Various research indicate that other than students and retired people, middle aged people have a highly practical approach towards using the internet (Duimel, 2007; Helsper, 2010). Where young internet users tend to create a virtual 'meeting spot' on the internet where they entertain themselves and socially interact with others, older internet users tend to use the internet first and foremost for more practical activities such as searching for information and e-banking (Duimel, 2007). The study by Helsper (2010) revealed that the older generations compared to younger generation more often make use of the internet to keep up with current affairs whereas the younger generation clearly participated more often in activities such as online entertainment and social networking. The study by Duimel (2007) among Dutch older adults who were either internet users or non-users, shows that older adults have a more practical approach towards internet use than do their younger counterparts. Older adults indicate to often make use of email to contact family and friends, to search for information, to execute e-banking activities and search for information about (public) transport such as timetables and roadmaps (Duimel, 2007). To use the internet for activities such as online gaming, downloading films and music and chatting online is far less popular among older adults as it is among younger internet users (Duimel, 2007). In the following graph, created by Zickurh (2010) who studied the online behaviour of the American

generations in the year 2010, it can be seen that the number of often executed activities decreases among the older generations. Also, activities that are related to fun and enjoyment such as ‘playing games’, ‘listening to music’, ‘IM – Instant Messaging’ and ‘watching a video’ are less often executed by the older generations compared to the younger generations (Zickurh, 2010).



Figure 2.4.1. Online activities per generation

Based on this graph it can be said that older generation less often uses the internet for hedonic values than do younger generations. However, now that the importance of internet technology in everyday life is growing it might be interesting to learn more about the opinions and perceptions of Dutch mediators about the internet and its utilitarian and hedonic values, to see whether those values are shifting in the current information era.

Communication and social interaction online

In both Dutch and more international orientated studies the possibility to communicate and socially interact with others is one of the most popular features of the internet, with email being the number one activity executed online by many internet users (Duimel, 2007; 'ICT, Kennis en Economie, 2011; Pan & Jordan-Marsh, 2010; Zickuhr, 2010). Email is perceived as a mean to be in contact with children, grandchildren and other friends and relatives who possibly live abroad and in different time zones (Duimel, 2007). According to Pan and Jordan-Marsh (2010) the ability to send email offers older internet users an increased level of social support and would prevent them from getting into depression or isolation. Compared to younger internet users, older and middle aged adults more often use email as a tool to communicate with friends and family, whereas young internet users use email mostly for formal situations and prefer to use social networking sites (SNS) to communicate with friends and family (Zickuhr, 2010). Although the numbers among older adults are not growing as fast as among the younger generations, the amount of older SNS users is rising (Madden, 2010). The main reasons for older people to go online on SNS are to keep in touch with family and friends, especially those of younger generations or of long geographical distance, and to share experiences and photos with friends and family, strangers or new friends (Waterman, 2011). The study by Ellison, Steinfield and Lampe (2011) exploring the connection strategies of undergraduate students on Facebook, currently the most popular SNS worldwide, reveals three different connection strategies. The first strategy, called 'initiating', describes how SNS users use Facebook to meet and interact with strangers and is the least common connection strategy. The second strategy, called 'maintaining', describes how Facebook users employ this SNS to interact with friends and relatives with whom they have close ties and is the most common used connection strategy. The third and last strategy is called 'social-information-seeking', and is often used by Facebook users to discover information about people with whom they have a weak or latent offline connection. Since the research studied the Facebook usage of undergraduate students in particular, the current study will explore the most common used connection strategy among Dutch mediators in order to explain their behaviour when using SNS. As explored by Cheung and Lee (2010) in a study about the intentional social action when using SNS, the subjective norm can be seen as one important motivator to start using SNS. Once people start using SNS another important aspect becomes of influence, according to Cheung and Lee (2010), which is called social identity. The feeling of being member to a certain group gives SNS users the motivation to continue to use the websites and further communicate and interact with others. This study aims to explore to what

extent social interaction with others and feeling a member of a group are motivators for Dutch mediators to use and keep using SNS. In general the usage of SNS is perceived as a more hedonic activity on the internet, since enjoyment and the creation of a pleasurable environment online are valued as important by its users (Lin & Lu, 2011). However, recent research by Xu, Ryan, Prybutok and Wen (2012) revealed that even though hedonic values as affection and leisure often motivate people to start using SNS, these values do get replaced by utilitarian values as 'coordination' and 'immediate access' once users get more experienced and more aware of the benefits in using SNS. Xu et al. (2010) state that these results do not exclude hedonic values as an important motivator to use SNS but aim to stress the importance to also take into consideration the utilitarian values that emerge when using SNS. Since earlier research state that middle aged and older people in general have a more practical approach towards the use of internet and its services, this study aims to explore the perceptions of Dutch mediators regarding the practical and entertaining values of SNS.

Searching for information

Right behind the use of email to communicate with others, the most popular activity online executed by all internet users is the use of a search engine to retrieve information (Zickurh, 2010). Also among older adults, the use of a search engine to retrieve any kind of information is one of the most executed activities online (Duimel, 2007). However, the most relevant search topics are expected to differ among different generations, based on life stage, life changing events, experiences and values (Vuori & Holmlund-Rytkönen, 2005; Godfrey & Johnson, 2009). A search activity that is very popular among the older internet users, especially among American internet users, is searching for information about healthcare or personal health (Vuori & Holmlund-Rytkönen, 2005). When ageing, people may become in need of healthcare themselves or can become caretakers for needing parents, children or grandchildren, explaining why these are such popular search terms among 'young' elderly (Vuori & Holmlund-Rytkönen, 2005). Topics that are further of interest among older adults when searching for information online are travelling, e-banking, shopping online and product reviews and online and offline leisure and recreation. It is find remarkable that especially among internet users between 45 and 65 years old searching online for information on leisure, entertainment and recreation is often related to interest, hobbies or activities that are executed offline (Weatherall, 2000). Purchasing tickets for the movies or theatre, ordering books online and making travel reservations are all very popular among middle aged internet users, even though the actual entertainment is to be found offline (Vuori & Holmlund-Rytkönen, 2005; Haddon, 2000; Weatherall, 2000). This might be explained by the active lifestyle middle aged people are used to, with little room for media and technology (Haddon, 2000). In this study will be researched whether the practical approach of middle aged internet users towards internet use is related to the activities executed online, such as their search for information and the perception of leisure and entertainment online in relation to offline entertainment.

Online entertainment

As stated before, entertaining activities online are not very popular among older internet users (Duimel, 2007). In a study by Helsper (2010) it can be clearly seen that the entertainment values of internet usage decrease when internet users are older, indicating that this group of internet users is not using the internet to pass time or to entertain themselves. These findings are in accordance with the study by Zickuhr (2010), who studied the internet practices of various American generations. Also in the Netherlands, research by CBS (2011) revealed that the differences between the oldest and youngest generations are larger for social and leisure activities such as downloading music and gaming online than for utilitarian activities such as emailing and searching for information ('ICT, kennis en economie', 2011). Duimel (2007) states that even though online entertainment is not found very popular among older internet users, women tend to be more active than men in gaming online and chatting via instant messaging services. Especially the finding that older or middle-aged women tend to be more active in online gaming is contradictory to studies that studied the overall internet population and showed that online gaming is often perceived as a male-dominant activity (Helsper, 2010). Therefore, this study aims to retrieve more information about the perceptions and opinions of Dutch mediators regarding online entertainment and online gaming in particular.

Shopping online

According to research by the Dutch CBS (2011) the group of internet users between 45 and 65 years old is the second most active group in online shopping, after the group of internet users between 25 and 45 years old. The most purchased products online by middle-aged internet users are health and healthcare products, travel reservations, financial affairs and books and electronics (Vuori & Holmlund-Rytkönen, 2005). Even though shopping in general is considered a more female-dominated activity, related to values such as leisure, social interaction and enjoyment, online shopping turns out to be a more male-dominated activity, perceived as convenient, practical and related to necessity (Helsper, 2010; Scarpi, 2011). Taking into consideration the welfare status, the economic power of the Dutch mediators and their willingness to pay for more luxurious products and services, it would be interesting to learn more about the online shopping behaviour of Dutch mediators and their perceptions and opinions regarding shopping online, in order to appeal or attract more to this specific target group. Related to shopping online is the activity of 'window shopping', where internet users have the possibility to read reviews about products and services written by other consumers, and compare the prices of various products and online shops prior to purchasing a product (Helsper, 2010). Especially the generations of internet users between the age of 40 and 54 years old and 55 and 64 years old are active in writing and reading reviews about what they have read or experienced online or about the products they have used (Zickuhr, 2010). A study about the credibility of electronic word of mouth (e-WOM) shows that the credibility of online reviews is influenced by the level of internet usage, meaning that heavy internet users perceive the information on the internet such as online reviews and

blogs as more credible than do moderate or light internet users (Mack, Blose & Pan, 2007). However, as stated by these researchers, does nothing beat the traditional word of mouth (Mack et al., 2007). No literature about the perceived credibility of online reviews among middle aged or older internet users was found during this study. It therefore seems interesting to retrieve more in depth information on this phenomenon since middle aged people are said to be active readers and writers of online reviews (Zickurh, 2010) even though the majority of them is not heavy internet users, which might influence the level of perceived credibility of online reviews among middle aged users (Mack et al., 2007). This study aims to explore how Dutch mediators perceive online reviews and whether it influences their purchasing behaviour.

Privacy online

Internet technology becomes ever more necessary in people's daily lives in order to participate in both society as in the working force. Nevertheless, more and more online services that used to be part of the free and open source environment called the 'world wide web' are being commercialized by internet corporations (Milberry & Anderson, 2009). The usage of online services as the Google search engine or the social networking site Facebook appears to be free, but internet consumers do not seem to be aware of the fact that they are leaving behind valuable information by subscribing to these services and browsing their websites, that is of great market value to these corporations (Milberry & Anderson, 2009). Instead of the internet being a limitless digital space where information and consumers can move freely, media ownership is changing the internet into an environment with enclosed spaces only accessible to members (Arora, 2012). These enclosed online areas are referred to as 'walled gardens', giving users the perception of being in a community and providing them with a sense of identity and security. Nevertheless, both voluntarily and because of underlying internet infrastructures, internet users increasingly sacrifice parts of their privacy (Arora, 2012). In a study by the Dutch CBS (2011) about the perception of safety and privacy on the internet among Dutch internet users is shown that a large majority of the internet users is somewhat concerned about the privacy issues that emerges with extensive use of the internet. Especially the misuse of personal data and the violation of privacy are of great concern among Dutch internet users ('ICT, kennis en economie', 2011). The study also reveals that number of people that encounter problems with safety and privacy online decreases when the internet users are older, probably because their less extensive use of the internet compared to their younger counterparts. Since the study does not give any further information about age or generation specific aspects regarding internet safety and privacy online, this study aims to retrieve information on to what extent the Dutch mediators perceive the internet as safe, to what extent they are aware of the privacy issues emerging with extensive internet usage and whether they know how to prevent problems with internet safety and privacy online from happening.

2.5. The usability of the Internet

Changes in the physics of older adults might come with issues such as hearing problems or a decline in vision, making it difficult to navigate online and on the computer. Furthermore, changes in older adults cognition might lead to a short attention span or problems with short term memory, making it difficult for older adults to use a website with noisy interfaces or many distractions. Being aware of the difficulties that older Internet users have to overcome when they are interested in using online communication technologies will help web developers to encourage and facilitate Internet usage among older adults (Wagner et al., 2010). Without responding to the digital needs of older adults this important and growing part of the population might feel socially excluded, which could lead to an expanding digital divide in which the digital knowledge gap between younger generations of Internet users and their older counterparts might grow larger and larger (Godfrey & Johnson, 2009). To motivate older adults to go online and use the internet it is important to make clear to them what the practical and personal benefits of internet usage can be and to provide with them with simple, easy to use platforms and websites (Wagner et al., 2010; Broady, Chan & Caputti, 2010). According to Waterman (2011) older people are not hesitating to go online and to indulge themselves in the possibilities of social media but they lose their interest in it because many SNS or online applications are not developed with the skills and preferences of older people in mind. Taking both the physical and cognitive declines that come with aging in mind when designing and developing websites and platforms online for older internet users, web designers should think of using larger fonts, clear combination of colours, static designs and layouts that do not require precise mouse movement (Wagner et al., 2010). Websites with moving and changing images confuse and distract the older users, too much text or information might scare the users and when one aspect of a website does not function as expected, older adults easily leave the website assuming that the whole website does not function properly (Breed, 2013). Another important factor regarding the usability of websites for older users is a consistent navigation within a site and even across different websites (Hanson, 2009). Older users do not do well with so-called simplified web interfaces that hide the functionality of a webpage (Hanson, 2009). Breed (2013), researcher of website usability in the Netherlands, explains the importance of internal and external consistence when designing a website. Internal consistence is by Breed (2013) defined as a specific action that, when executed repetitively, constantly has the same effect such as clicking a certain button and always ending up at the same page, finding the same or similar information. Breed (2013) defines external consistence as the performance of a specific action on various websites having the same effect, such as clicking the 'home-button' to reach the homepage of a website or clicking the 'contact-button' to get in touch with a company. Consistency is closely related to what the internet users is used to and what he had learned from earlier experiences with the Internet.

However, it could be argued if clear, easy to use, fast and secure websites is not something every internet user would want, as stated by Vuori and Rytönen (2005). Besides that, a low

perception of the usability of a website might also be caused by a low level of computer and internet experience. Nevertheless the opinion of the majority of experts is that older internet users would benefit from separate or modified websites that are designed especially for them (Vuori & Rytönen-Holmlund, 2005; Hanson, 2009). According to Hanson (2009) it is therefore disappointing to see that there is such a big lack of websites designed with the preferences of this specific target group in mind, even among those websites that are targeting the older internet users as their core user.

Even though it is stated by earlier research that the internet in general does not meet the needs and preferences of older internet users regarding the usability of the websites, older internet users are the fastest growing group when it comes to adopting internet technologies (Watermann, 2011). This could indicate that even when these technologies do not meet their needs and preferences, older adults are still motivated to try and use the technologies. This research aims to examine whether Dutch mediators have specific needs or preferences by discussing the feasibilities of different webpages during the focus groups, by asking the survey respondents about their preferences when browsing the internet and by asking them to rate to what extent their needs and preferences are met when surfing online. It is important to explore the digital needs and preferences of the Dutch mediators since earlier research indicates that many web applications are designed with the younger internet user in mind, therefore lacking to attract the large group of middle aged or older internet users. By exploring general patterns on how the usability of the internet is perceived by Dutch mediators and by retrieving in depth information about their opinions and perceptions regarding internet usability and learning whether or not this influences their browsing behaviour, this study could shed another light on web design for the older internet user.

2.6. Gender differences online

Gender differences in Internet usage have been, just as gender differences in other forms of technology usage, widely documented in many various researches (Pan & Jordan-Marsh, 2010). Gender is often regarded as an indicator of the adoption and acceptance of technology. Both socially and culturally, males are assumed to have a more positive attitude towards technology and to hold less anxiety towards innovations. This is demonstrated by various research in the last few decades, studying the relationship between gender and technology usage or the intention to use technology (Pan & Jordan-Marsh, 2010). When looking at the adoption and acceptance of new technologies and innovations in general men are considered to perceive new technologies as more useful compared to women, while women are highly influenced by the perceived ease of use of a specific technology when considering the adoption of new technologies (Ong & Lai, 2006 and Venkatesh & Morris, 2000 in Pan & Jordan-Marsh, 2010). A study by Pan and Jordan-Marsh (2010) among Chinese older internet users, shows that males were more likely to use the internet than were women. Besides being more active internet users, men are also found to have a more wide range of internet experience compared to women (Czaya et al., 2006). In Wagner et al. (2010) an overview of various studies

regarding this correlation shows that being male influences the use of computers and other technology positively. Women tend to have a lower level of self-efficacy and a higher level of computer anxiety, leading to a lower level of effort expectancy and perceived ease of use compared to men (Nägle & Schmidt, 2012). Even though it can be stated that a gender gap regarding internet usage does exist, it is expected that this gap will shrink in the coming years. In Pan and Jordan-Marsh (2010) a national survey among Chinese internet users is used to indicate that in the year 2008, Chinese men only had a minor lead on Chinese women regarding the use of internet (Chinese Internet Network Information Center, 2008 in Pan & Jordan-Marsh, 2010). It can also be seen in this study that the internet use growth rate of women exceeds the one of men, meaning that more and more women are starting to use internet compared to men. A similar trend was found in the Netherlands by Duimel (2007), who shows in a graph that the difference between men and women regarding internet access got smaller over the last decade. These findings are similar to a trend found in the US by PEW Research Centre (2006), indicating that both men and women in the US were equally likely to make use of the internet in 2005. According to Morris, Venkatesh and Ackerman (2005) this is only true for the group of younger adults active in the workforce. Especially among older adults in the workforce it is shown that older male workers are more likely to be computer users on the job than older female workers. In a group of younger adults such a pattern wasn't found. In Helsper (2010) gender differences in ICT use are said to be generational and therefore temporary. According to researchers the environment of young men and women is more similar with regards to ICT use, compared to older men and women. By conducting a focus group with only female participants, one focus group with only male participants and one focus group with both male and female participants this study aims to explore whether internet usage among Dutch mediators is influenced by gender and how gender affects the range of activities of both men and women.

Although Helsper (2010) agrees with the assumption that gender differences regarding internet use and the time spent online are decreasing, she states based on earlier research that gender differences still might appear regarding the breadth of use and the level of internet skills. The results of this study show that the older internet users in general execute less tasks and activities online in the same time span as their younger counterparts. Starting in the age group of internet users between 35 and 44 years old men are using the internet more broadly as do women, with the largest differences in the oldest age groups. Even though strong gender differences can be found in older age groups, also during the life stage of employment the gender differences are clearly marked, compared to the generations of students and retirees (Helsper, 2010). Just as among married couples, the online activities and tasks in the workforce are more traditionally distributed as among students and retirees. Between married couples, males often indulge in online activities such as banking, financial services and applying for social services, whereas female internet users often spend their time playing games online and communicating online through MSN (free online messenger service) (Duimel, 2007). According to Duimel (2007) teachers of computer courses for older adults also agree that women tend

to be more interested in the various communication tools the computer and the internet have to offer, compared to men who have a more practical approach when using the computer and the internet. Especially for online shopping, men tend to have strong utilitarian approach towards internet use and tend to shop online most out of practical considerations. Just as in the offline world, women tend to have a more hedonic approach towards shopping, with emotional and social aspects highly valued. The lack of social and emotional aspect when shopping online results in less frequent and actual shopping online compared to men (Dittmar, Long & Meek, 2004). In a study by Helsper (2010) three typical online activities were studied in relation with gender. The search for sexual content is found to be a male-dominated activity, the search for health-information is found to be a female-dominated activity and even though shopping is a female-dominated activity offline, it is found to be a male-dominated activity online. In consensus with earlier research, communicating online is considered a more female activity however online entertainment (online gaming, e.g.) is, contradicting to what was stated by Duimel (2007) considered to be a male activity (Helsper, 2010). By asking the survey respondents to rate how frequently they execute certain tasks or activities online and how often they search for particular information, this study aims to reveal general patterns and possible gender differences among Dutch mediators in both actual online behaviour and motivations to go online and browse the internet.

3. Research methods

This chapter describes the research methods that are used in this study to collect the research data, to analyse the data and to translate the research results into conclusions and practical implications.

3.1. Methodology

In social sciences, researchers often aim to explain a certain behaviour of a specific group of people. Research in social sciences aims to explain a part of social life (Abott, 2004). This study is explorative of nature, meaning that I will study specific social behaviour in order to explore and explain general patterns in society (Abott, 2004). In this study, I aim to explore and explain the specifics in the online behaviour of Dutch mediors on the internet and learn to what extent those specifics in behaviour, needs and motivations are related to age and culture. For some reason there appears to be a gap in academic literature about the internet practices and preferences of middle aged internet users (Salovaara, Lehmuskallio, Hedman, Valkonen & Näsänen, 2010). Internet users aged 50 years and up are often treated as one homogeneous group without further segmentation based on life stage, experiences and values (Hanson, 2009). Nevertheless, the age group of internet users between 45 and 65 years old share particular characteristics and life changing events that make this group interesting for more detailed research (Salovaara et al., 2010; Godfrey & Johnson, 2009). In order to adequately explore and explain the behaviour of Dutch mediors online, two research methods are combined into one mixed method. This study has a qualitative research objective (to explain the behaviour of Dutch mediors on the internet) and uses both qualitative and quantitative research in order to perform qualitative analysis. The two basic social sciences methods that are used in this study are surveys, meaning that I use a questionnaire to gather quantitative data and ethnography, meaning that I gather data by personal interaction with respondents (Abott, 2004). With the survey, the collection of quantitative data, I aim to explore and identify the general patterns in the behaviour of Dutch mediors on the Internet. By having focus groups with Dutch mediors, I gather words and narrative that can be used to add value and meaning to the numbers coming from quantitative research (Johnson & Onwuegbuzie, 2004). When employing mixed research methods the results from the quantitative research can be used to strengthen the findings of the qualitative study and vice versa, thereby eliminating possible bias from using only qualitative or quantitative research (Choudrie, et al., 2013). Johnson and Onwuegbuzie (2004) define mixed research methods as *'the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study'* (Johnson & Onwuegbuzie, 2004, p. 17). The use of a mixed research method within social sciences is not very common yet, even though Johnson and Onwuegbuzie (2004) state that combining qualitative and quantitative research could provide more detailed information about social behaviour leading to more adequate conclusions and practical implications.

3.2. Cooperating with WelkomLife

Prior to starting this research I was contacted by a Dutch online magazine called *WelkomLife*, asking me if I was willing to cooperate with them on a research about the internet practices of Dutch mediors. *WelkomLife* (www.welkomlife.nl) is an initiative of a couple of Dutch marketing and communication entrepreneurs, who noticed a gap in the online information service for people between the age of 45 and 65. Entering a new stage in life in which children move out, retirement comes closer and other interests about how to spend their money and their free time, this group of people does not have any online community to assemble and interact with each other. *WelkomLife* is attracting internet users between 45 and 65 years who still live an active life (both offline and online) and provides them with daily columns and background stories and human interest stories about health, society and lifestyle. Launched in September of 2012, *WelkomLife* is currently still struggling to generate a high amount of traffic to the website. With a marketing strategy focussing on social and online media, they have asked me to study when and why their target audience is online and what these people are doing when making use of the Internet.

WelkomLife is providing me with a large amount of information about this market, existing out of market analyses, marketing strategies en target audience analyses. Together we distribute the online survey through the online communication channels that *WelkomLife* employs, being their website, email addresses and social networking sites. Furthermore the *WelkomLife* website is used during the qualitative part of this study, the focus groups, in order to explore the digital needs and preferences of Dutch mediors when browsing the Internet. The *WelkomLife* webpage is the starting point of the focus groups, asking the participant to evaluate the website and reveal their thoughts on it. During my research I report weekly to the community manager and the board of directors about interesting and remarkable findings that crossed my path, in order for them to immediately respond to that. Ultimately, after having analysed all my results and drawn some conclusions out of that, I provide *WelkomLife* with practical implications regarding the content of the website, the look and feel of the website and the marketing strategy of the company. Hopefully these recommendations will help *WelkomLife* in establishing a fruitfully marketing and communication strategy and in building up a large and strong community for mediors online.

I would like to make clear that this research is not a case study and that I am not solely researching mediors who are already using *WelkomLife*. It is our goal to explore what mediors in general practice on the internet and how *WelkomLife* can appeal to that. I am studying the Internet behaviour of the Dutch mediator in general and *WelkomLife* is providing me with a platform to reach out to them.

3.3. Online surveys: the quantitative research method

In order to collect a large amount of quantitative data about the behaviour of Dutch mediors online, I distribute an online survey. Surveys and questionnaires are an example of quantitative

research methods and aim to collect a large amount of data about a specific group or phenomena in order to learn if general patterns can be found (Johnson & Onwuegbuzie, 2004). The survey is distributed online both for practical and for theoretical reasons. First of all, distributing the survey online saves on printing and shipping costs. Besides that, the questionnaire has a much larger (national) reach when spreading the survey online. The online survey is distributed through the WelkomLife webpage, the WelkomLife Facebookpage and the WelkomLife Twitterfeed, all having a national reach of internet users within the target group. Furthermore the survey is spread in my own online social network via email to friends and relatives that fit the sample, asking them to also pass on the survey to their friends and relatives that fit the sample. Lastly, the survey is only spread online because I am particularly looking at the Internet practices of Dutch mediors meaning that I have to fish where the fish are, which is on the internet. Even though it might be interesting to study the reasons of mediors to not use the Internet, this lies beyond the scope of my study. It is therefore irrelevant spread the survey offline and blur the sample with respondents who might not resemble with the target audience.

3.3.1. Sampling

The research focuses on Dutch Internet users between 45 and 65 years old. Such a large sample is chosen in order to have the opportunity to obtain a large number of respondents and collect a large amount of data. A large amount of data will minimize the chances of possible errors when generalizing the findings (Saunders et al., 2003 in Choudrie et al., 2013, p. 6). As stated before, the survey is spread online in order to only have research participants who are actual users of the Internet. Considering the chosen target group of this research, the language of the survey is Dutch. To make sure that the respondents have a clear understanding of the questions that are asked throughout the survey, special attention is paid to the wording of the question and the response options. There is made sure that typical internet-buzzwords as ‘social networks’, ‘wireless’ and ‘gaming’ are translated from English into Dutch in order for the respondents to answer the questions reliably. Before spreading the survey online the questionnaire is tested by five test respondents to indicate mistakes, ambiguities and errors in the surveys. The feedback from these five test respondents resulted in minor adjustments. On average, it took the test respondents about fifteen minutes to fill in the survey completely. Looking at researches with comparable target groups this is considered as a reasonable time so no questions were deleted from the survey after the test period. To stimulate potential respondents to participate in the research and fill in the survey, incentives were used. When leaving their email address at the end of the questionnaire, the participants will receive a small wellness-package to thank them for their effort. On top of that, five gift cards of twenty euros each will be raffled among all participants after the survey period ends. Incentives are an effective and generally accepted way to significantly increase response rates in customer surveys (‘Survey incentives: response rates and data quality’, n.d.). It is argued that offering an incentive to participate in a study is

an extrinsic motivation to participate which might lower the quality of the collected data. However, studies have proven otherwise. Participants who are given an incentive are more likely to answer the questions completely and truthfully, making the collected data even more valuable ('Survey incentives: response rates and data quality', n.d.).

3.3.2. The questionnaire

The questionnaire that is used in this research can be found in the appendix of this document (translated to English). The survey is distributed online using email, social networking sites and the WelkomLife webpage. Since the focus of this study is on internet users between 45 and 65 years old, people below or above this age will be restricted from participation. The online survey is hosted by Qualtrics, an application provided by the university to collect quantitative data. Qualtrics is easy to use, reliable and offers the possibility to export the collected data directly to Excel or SPSS to prepare the data for analysis.

The survey starts by asking the respondents if they are between 45 and 65 years of age. For theoretical reasons the demographics of the respondents are asked in the last section of the survey, meaning that respondents who do not fit the target group would have to fill in all 44 questions before noticing that their data will be excluded from the analysis. Respondents who do not fit the target group will be thanked for their intention to participate but will be restricted to continue. The first part of the survey consists of questions about the respondents' online behaviour. In order to indicate how experienced the respondents are in using the internet, questions are asked about the number of years the respondents make use of the internet, the reason why they started using the Internet and their purposes of using the internet. There are also questions asked to see if a distinction between personal use and work-related use can be made, in order to learn more about the hedonic and utilitarian approach of Dutch mediators towards the internet. In order to retrieve more insight in the actual behaviour of Dutch mediators and their most often executed tasks, questions are asked about the frequency with which certain tasks and activities are executed, about most popular search topics and the devices used to go online. In the second part of the questionnaire the data about the activities that are executed on the internet and the internet preferences of the respondents are collected, in order to retrieve more information about the digital needs, preferences and motivations of Dutch mediators to go online. In the third section of the questionnaire the respondents are asked to give their demographic information such as age, personal status and occupation. The demographic data is considered important in this study in order to learn more about the influence of e.g. age and gender on the level of internet use and specific activities.

Even though the use of questionnaires to collect quantitative data has many advantages such as being a fast and efficient way of collecting data and the high level of generalizability, the research of media use has the disadvantage of the self-reported data (Prior, 2009). Even though it is not happening on purpose, respondents often find it hard to accurately answer questions about their level

of media usage or media exposure (Prior, 2009). Having difficulties to recall their level of media usage or media exposure at all respondents often start estimating their media exposure, often resulting in overestimation. Prior (2009) states that several experiments show that overestimating the level of media exposure is not related to a motivation to misrepresent or provide superficial answers, but primary to an imperfect level of recall. To lower the level of overestimation, researchers could provide the respondents with statistics to help them with the estimation. In this research, I do not provide any statistics with the questions about the level of Internet usage and the Internet preferences because I do not want to push the answers in a certain direction. However, I do take the high level of overestimating the level of media usage and exposure into consideration when analysing the quantitative data.

3.3.3. Operationalization

According to the conceptual model of this study, the questions in the survey were divided into three different categories. In the survey the respondents are asked about their actual behaviour online (1), their digital needs, preferences and motivations to go online in general (2) and their demographics (3). The questions in the first category of the survey are asked to gather data about patterns in the actual internet behaviour of the sample. The questions in the second category, about online activities, online preferences and digital needs, are asked to answer the three sub questions of this study. This data is used to test the conceptual model with the help of SPSS data analysis. The questions in the third category of this survey contain questions about the demographics of the respondents and are used to provide both the researchers and the reader with some characteristics of the respondents in the sample.

The complete survey exists out of 44 items, which are questions (both open and multiple choice) and matrixes consisting out of multiple positions. When asking the respondents to take a stand towards a certain position, a 7-point or 5-point Likert scale was offered. When using bipolar scales with a neutral point in the middle, reliability and validity are highest for seven points (Krosnick, 1999: 40). After running some test with both 7-point scales and 5-point scales on several matrixes, the test persons indicated that for some positions 7-point scales were too broad and for other positions 5-point scales were too narrow. This resulted in using 7-point Likert scales when asking for frequencies of specific behaviour and using 5-point Likert scales when asking for opinions. All points in the scales were labelled in order to make sure that the respondents would understand what was expected of them. Looking at the age difference between the researcher and the respondents it seemed more logical and polite to address the respondents in a somewhat formal way. When answering the questions it is made impossible for the respondents to continue with the survey without having asked all the previous, in order to avoid incomplete data files.

Online behaviour

The first category of the survey consists out of questions about the internet use of the respondents in

general. The survey is spread online so there is no need to ask the participants whether they used the internet or not, since they could not have encountered the survey otherwise. The respondents are asked for how many years they are using the internet, why they started to use the internet and how often, when and where they are using the internet (Q1, Q2, Q3, Q4, Q5). I also asked them which devices the respondents are using when going online, to learn more about the acceptance of new technologies such as internet phones and tablets (Q7). Earlier research shows that middle aged people often use the internet with a more practical approach as younger or older people do, therefore there are some questions asked about the importance and use of internet in both the respondent's working and private life (Q11, Q12, Q13, Q14) (Duimel, 2007). Respondents were asked to what extent they agreed upon using the internet for tasks as communicating with others, searching for information etc. (Q6). The list of activities was designed after similar questions in comparable studies ('ICT, kennis en economie', 2011; Vuori & Holmlund-Rytkönen, 2005). Since physical and cognitive decline starts on average around the age of 45 to 55 years old, the respondents were also asked if specific conditions influenced their internet use (Q10) (Vuori & Holmlund-Rytkönen, 2005).

Digital needs, preferences and motivations to go online

In the second part of the survey the respondents are asked about their opinions about various factors of the internet. The respondents are asked to indicate to what extent they agree with some characteristics of the internet (Q15). Those characteristics are partly taken from the survey as designed by Vuori and Holmlund-Rytkönen (2005) and partly extended with own interpretation of important characteristics. They are asked to indicate how often they execute various tasks online (Q18). This list of activities is designed after information extracted from the survey designed by Vuori and Holmlund-Rytkönen (2005), information from CBS ('ICT, kennis en economie', 2011) and results from academic studies (Duimel, 2007; Hart et al., 2008; Hanson, 2009; Moore, 2012). The same goes for the questions about most often use search topics (Q20), however in this question is taken into the consideration the information that is being offered by the Dutch online platform WelkomLife, in order to learn how popular the information offered by this website is among the target group. There are some questions asked about the use of SNS when going online. These questions are asked to learn more about the most popular SNS and means of online communication among the Dutch mediators, but also to explore the motivations of this target group to use SNS. Researches show that even though older adults are adopting to SNS at a slower pace than do younger adults and teens, they have learned to adjust the use of it to their own needs and might therefore have different motivations join SNS than their younger counterparts. The questions about searching for online and offline entertainment are asked for the purpose of WelkomLife, to explore what sorts of information might be valuable to add to the online magazine. According to Weatherall (2000 in Wagner et al., 2010) the online search activities of adults are often related to offline interests and hobbies, partly because adults are used to having an active lifestyle without less presence of media and technology in it (Haddon, 2000),

explaining why both online and offline entertainment are included in the survey. In the following two matrixes the respondents are asked to what extent they perceive the use of the internet as easy, clear and logical and to what extent they believe that the internet is mainly for young people or also appeals to the needs of people their age (Q30), in order to explore what the target group appreciates about using the internet and what not (Vuori & Holmlund-Rytkönen, 2005). The respondents are also asked to what extent they believe their environment expects them to use the internet (Q31), in order to further explore the subjective norm as explained by Cheung and Lee (2010) and to explore whether the respondents find the use of internet dominating their social life.

Demographic factors

Since the questions about demographic factors are often the easiest questions in the survey, I decided to save this set of questions to the end, to make sure that the respondents would focus first on the more important questions and positions. The demographics exists out of a random set of factor asking respondents about their age, sex, level of education, relational status and nationality. Besides a question about their actual age, a question about their perceived age was included as well, since it is stated by Bernstein (2001 in Yang and Jolly, 2008) that even though this target group might be viewed as being old, they do not perceive themselves as old. Question 34 therefore asks respondents how old they feel in relation to their chronological age (younger, similar or older) (Vuori & Holmlund-Rytkönen, 2005). This study focuses on the internet behaviour of Dutch mediors, so therefore the nationality of the respondents was of importance (Q36)¹. Respondents who are not of Dutch origin would be excluded from the sample. The respondents is asked whether they have children or grandchildren and whether they life in a single, double or multiple-persons household (Q41, Q42, Q43). This is asked because earlier studies show that the social environment of older adults is of influence when starting to use new technologies and new media (Cheung & Lee, 2010). Asking the respondents about their profession (Q39) could provide the researcher with insights in the level of computer experience of the respondents, since people who are working actively on the computer to perform their jobs are expected to be more experienced (Wagner et. al., 2010). At last, respondents are asked how they perceive their health, to see whether they perceive themselves to be in good or in bad health despite their increasing age (Q44) (Vuori & Holmlund-Rytkönen, 2005).

3.3.4. The population

After one week of online recruiting for respondents, 185 internet users opened the online survey. Of them 27 did not start filling in the survey and 19 quit filling in the survey somewhere done the road. This left me with 139 completely filled in survey. Unfortunately 5 of those respondents did not fit the age sample, meaning that they were younger than 45 or older than 65 years old. 134 filled in survey are suitable for data analysis. The sample population is skewed since 70,5% of the respondents

¹ The number Q... relates to a specific item in the questionnaire, not to the place in the survey according to chronological order.

indicated to be female, against 29,5% of the respondents who are male. The average age of the respondents is 52,8 years old. 77% of the respondents claimed that they feel younger than they actually are, meaning that their chronological age does not match their perceived age. 76,9% of the respondents indicated to be in good health.

3.3.5. Data collection of the quantitative data

I aim to collect a minimum of 120 filled in surveys. Looking at other quantitative researches, the number of respondents or participants often lies between 100 and 200. A target number of 120 filled in surveys seems like a sufficient number to draw conclusions upon and at least give an indication of patterns in the internet behaviour of Dutch mediators in general. The collected data is analysed using SPSS. In order to calculate stronger correlations some of the variables having an ordinal scale on a 7-point Likert scale, asking about frequencies of certain behaviour, are recoded into ordinal variables having 4 categories. The categories never (1) and rarely (2) remained the same, the categories monthly (3) and less than once per week (4) are recoded into monthly (3) and the categories weekly (5), more than once per week (6) and daily (7) are recoded into weekly (4). To calculate ordinal correlations with both age (scale variable) and gender (nominal variable) these variables are recoded into ordinal variables. Age is recoded into the four categories 45-49 (1), 50-54 (2), 55-59 (3) and 60-65 (4). The fourth category, 60-65 contains one value extra in order to include all ages between 45 and 65 and spread out the respondents most evenly over the four categories. The nominal variable gender is transformed into a dichotomous variable that can also be used to calculate ordinal correlations by recoding the value male (1) into no female (0) and female (2) into female (1). Since most of the variables have a nominal or ordinal scale the most used correlations in the analysis are Cramer's V and Gamma. Where possible variables will be treated as scale variables and correlations as Spearman's Rho and a linear regression analysis will be calculated. Unless stated otherwise, the significance of the correlations is tested on a level of 95%. The interpretation of the strength of the correlations is done according to the following guidelines (Van Groningen & De Boer, 2010):

0 – 0,10: no correlation/extremely weak

0,11 – 0,30: weak correlation

0,31 – 0,50: moderate correlation

0,51 - 0,80: strong correlation

0,81 – 1: extremely strong correlation

1: perfect correlation

3.4. Focus groups: the qualitative research method

To get deeper insights in the mediators' Internet behaviour, a form of qualitative research is employed to strengthen and explain the quantitative results. Focus groups to obtain qualitative data is used as research method in this study because it gives me the opportunity to obtain qualitative data

from a couple of respondents simultaneously (Choudrie et al., 2012). The various experiences and opinions of the participants in the focus group stimulate the participants to elaborate on attitudes and opinions that they would not have talked about or thought of during an in-depth interview. An advantage of using focus groups in comparison to in-depth interviews is therefore the richness of opinions a researcher will find in a relatively short amount of time (Choudrie et al., 2012).

3.4.1. Sampling

To collect a set of qualitative data and to conduct a representative study of the target group a total of three focus groups is organized. The focus groups consists out of 4 to 6 people. A small group size is recommended because of time constraints when having a focus groups. The focus groups last for about ninety minutes, meaning that every person will have around fifteen or twenty minutes to speak for himself in total. This is seen as being sufficient when having focus groups. Having focus groups with more than six participants is discouraged because of this reason (Wimmer & Dominick, 2011). One group consists only out of men, one group consists only out of women and in one group the genders are mixed. This in order to get a view on possible gender differences or similarities that could influence the ways in which the Internet is used and the preferences that Internet users might have (Wimmer & Dominick, 2011).

The focus groups take place at the WelkomLife-office, Fier Denkwijk in Reeuwijk, The Netherlands. Participants will be recruited through the WelkomLife-website, the WelkomLife-facebookpage and my own social network of friends and relatives. The participants willing to join a focus group are invited to the office of Fier Denkwijk in Reeuwijk, where WelkomLife operates from. A meeting room is available to welcome the participants. The focus groups are taped on audio and maybe on video. The participants shortly have the time to meet with each other prior to starting the focus group. First I ask all the participants to fill in a short questionnaire with questions about their demographics and their computer and internet habits. This data can be used to illustrate notable opinions or experiences that may come from the conversation or to ask more detailed questions during the conversation. After filling in this questionnaire all participants receive an internet device to use during the focus group. Then I introduce the topic of the focus group and give some guidelines about how to participate in this focus group and the focus groups start. The focus groups last for about 60 to 90 minutes, depending on the number participants. Afterwards the participants are thanked for their cooperation and they receive a goodiebag with gifts and coupons from WelkomLife and its partners.

The following table gives details about the participants and shows in which group each participant joined the focus groups.

Name	Date of the FG	Duration of the FG	Age	Sex	Focus group	Identification Code
Marjan	May 11, 2013	0:55 hour	50	F	Women	F1
Wilma	May 11, 2013	0:55 hour	50	F	Women	F2
Marcella	May 11, 2013	0:55 hour	49	F	Women	F3
Marian	May 11, 2013	0:55 hour	53	F	Women	F4
Pierre	May 13, 2013	0:48 hour	53	M	Men	M1
Sander	May 13, 2013	0:48 hour	45	M	Men	M2
Nico	May 13, 2013	0:48 hour	65	M	Men	M3
Renze	May 14, 2013	0:59 hour	47	M	Mixed	MGM1
Peter	May 14, 2013	0:59 hour	57	M	Mixed	MGM2
Ivonne	May 14, 2013	0:59 hour	47	F	Mixed	MGF1
Alice	May 14, 2013	0:59 hour	55	F	Mixed	MGF2

Table 3.4.1: Participant details

3.4.2. Preparing focus groups

When organizing focus groups, it is not necessary to prepare a long list or set of questions in order to obtain the needed information or to keep the conversation going. It is more important and more beneficial to the research to be flexible and to let the conversation flow. As the researcher and the moderator of the focus groups I prepared a list of themes and a couple of question that fit those themes in order to stimulate a conversation in which the participants can express themselves freely and topics and themes will follow up smoothly (Wimmer & Dominick, 2011). The flexible structure of focus groups in general allows the moderator to follow up on topics or opinions that are not stated in the topic list and to come back to the topic list in a later stadium of the conversation. Besides having a list of themes and topics to talk about, I provided all of the participants with an Internet device to let them surf the Internet and the WelkomLife-page freely and to execute some tasks for me. By letting them doing this, I hope to get some discussion, opinions and experiences about usability and readability of various websites and to learn what the preferences of the mediors are when surfing the web.

When moderating a focus group it is important to know upfront that various types of people will participate in this group, who all need about the same amount of speaking time to express their opinions and experiences. As a moderator, it is my job to make sure that even the *shy person* will have a say during the discussion and to prevent that an *over-talker* or *know-it-all* will continuously draw the attention to him/her (Wimmer & Dominick, 2011). May these problems occur during the focus groups, I will gently interrupt the discussion and ask a shy person to share his opinion with us, ask a talkative person to answer briefly or to compliment the know-it-all on his knowledge while asking him to listen to what the others have to say as well.

3.4.3. Analysis of the qualitative data

The focus groups are conducted to explore the specific needs and preferences of the older but experienced Internet users. All the information obtained during the focus groups is therefore transformed into textual transcripts and analysed using textual codes. Opinions and experiences expressed by the participants are identified and coded on their level of importance. When no new information regarding experiences and opinions is identified, information saturation is reached (Wimmer & Dominick, 2011). It is difficult to predict the needed number of focus groups to reach information saturation. However, looking at the variation of the three groups, it is expected that three focus groups would be sufficient to gather some in-depth information about the digital needs and internet preference of Dutch mediators in relation to gender differences.

3.5. Validity and reliability of the research

To make sure that the results and the conclusions of this research are valuable and correspond with the empiricism, the research methods should have a high level of reliability and validity.

3.5.1. Reliability

A research is considered highly reliable when the data is free of accidental mistakes, meaning that the respondents asked the questions in the survey correctly and that they are familiar with the wording and concepts used in the survey (Boeije, 't Hart & Hox, 2009). Furthermore, the researcher should be careful not to make any typing mistakes when entering the data into data analysis programs, such as SPSS. Prior to launching the survey online, the survey was carefully tested to see if any questions or tasks in the questionnaire were unclear and if the wording was appropriate for the target audience. Typical buzz-words such as 'gaming', 'social networking sites', 'matrix' and 'wireless' are carefully translated into Dutch, to avoid any confusion or unclearness when the respondents are filling out the survey. When having focus groups, three different focus groups will be organized. One group will exist only out of men, one group will consist only out of women and one will be a combination of men and women. This in order to explore and explain any gender differences and to reach the highest level of information saturation within the relatively small time span. Prior to having the focus groups I, as the moderator of the conversations, prepare myself by reading articles, tips and tricks about moderating focus groups to avoid making the most common mistakes and to make sure that every participant will receive the same amount of speaking time. Since the reliability is related to accidental mistakes and not to mistakes that influence the research systematically, it is expected that when a large enough sample is used those accidental mistakes will be balanced (Boeije et al., 2009). A high amount of accidental mistakes could therefore weaken the research results but will not devalue the results or conclusions of the research.

3.5.2. Validity

When discussing the validity of a research, the focus lies on the systematic mistakes that occur when collecting the research data (Boeije et al., 2009). These mistakes occur every time a research method is used to gather the data and therefore portrays the reality incorrect. When researching social sciences and thus trying to give general conclusions about social behaviour by studying a sample of the society, degradation of the validity could therefore heavily influence the conclusions of the research (Boeije, 2009). Degradation of the validity occurs for example when the used sample is considered too small or when it does not reflect the research population sufficient. Another factor causing of a low level of validity could be a high amount of social desired answers, especially when using self-reported data such as surveys (Prior, 2009). In this case, respondents might refuse to answer highly personal questions or are not completely honest when answering personal questions, because they do not like to share negative experiences or are afraid to be seen as an outlier.

To avoid having a research sample that does not represent the population of Dutch mediors online, the online survey is spread out as broad as possible. During this research, the online survey is spread out nationally through Facebook, the WelkomLife-webpage, other WelkomLife communication channels (such as the weekly newsletter) and through my own network of friends and relatives. The WelkomLife-Facebookpage is rather female dominated, so therefore it is important to also use other communication channels such as the WelkomLife-webpage, newsletters, email and other Facebookpages to reach a large and representative part of the target audience. During the various focus groups, the moderator should be aware of participants who are avoiding to answer specific questions or who might be giving social desired answers, especially since focus groups might enhance a feeling of (subjective) peer pressure (Wimmer & Dominick, n.d.).

To enhance both the level of validity and the level of reliability of this research, the research methods are in detail described and recorded in order for other researchers to repeat this research and retrieve similar results. Furthermore the concepts used during this research are carefully defined, in order to prevent misunderstandings of important concepts when repeating this research.

4. Findings

In this chapter the findings of the study, coming from both a quantitative study in the form of an online survey and qualitative data in the form of focus groups, are being discussed and explored. The findings will be compared to the theories that already exist on this subject and linked to previous literature. Looking at the explorative nature of this study it might not always be possible to link certain findings to theories or previous literature. The focus in this chapter therefore lies on exploring and identifying characteristics in the online behaviour, online preferences and digital needs of Dutch mediors, influenced by either their age or perception of age and/or their sex. Of importance are whether Dutch mediors show specific aspects in their behaviour that can be linked to their age or life stage, whether they have particular preferences when going online or motivations to go online and whether they have specific digital needs regarding the usability of the internet and websites, since it is often argued that both physical and cognitive decline make it difficult for older adults to learn how to use new technologies.

This chapter is divided into five different parts. All paragraphs contain statistical information retrieved from the online survey, data coming from the three focus groups and an analysis of both the qualitative and quantitative data in relation to the existing literature. The first paragraph focuses on the online behaviour of the Dutch mediors in general, their motivations to go online and their preferences regarding the wide range of activities that can be executed on the internet in order to explore and explain specific aspects of the online behaviour of Dutch mediors. The following three paragraphs give a more in-depth analysis of typical online activities that receive remarkable attention in the existing literature, however those researches are rarely specified on middle aged consumers or Dutch internet users. The first of this three paragraphs is about shopping online and reading and writing product reviews online, since middle aged internet users seem to be very active in both these activities. Nevertheless, empirical data for Dutch middle aged internet users is lacking, therefore this study aims to explore and explain general patterns in their online shopping behaviour and more in-depth information about their perceptions, motivations and opinions regarding shopping online. The second out of three paragraphs is about searching for health information online. Searching online for health information is a search activity that is highly popular among American internet users of all ages but especially among middle aged internet users, looking at their role as caretaker and the possibility to experience problems with their personal health. Again this research aims to shed light on the Dutch middle aged internet users in particular, since no empirical data specified on this subject is found. The third out of the three paragraphs is focused on the use and motivations to use SNS. The use of online SNS is growing worldwide and although originally designed for teens and students to communicate with each other, middle aged and older adults are now the fastest growing group to accept and adopt SNS in their daily lives (Watermann, 2011). Taking into consideration that SNS are not designed with the middle aged and older internet users as consumers in mind, this study aims to explore how this age cohort is using SNS as a way to communicate with others and what their views and opinions about the

use of SNS are. The last and fifth paragraph of this chapter is about the usability of the internet and websites. General opinions of Dutch mediors are retrieved from the online survey. Researchers often state that from the age of 45 people will experience difficulties in using the computer and the internet. By letting the focus groups participants browse through various websites, more in-depth information is retrieved about their perceptions and opinions regarding the usability of websites, indicating whether or not Dutch mediors do have specific digital needs when browsing the web and whether middle aged internet users primarily think of the barriers to use the internet or of the opportunities of using the world wide web. In all paragraphs the online activities of the Dutch mediors will be discussed, just as their digital needs, perceptions and motivations to go online or (not) execute certain tasks and the gender differences that arise between male and female Dutch mediors.

4.1 Online activities of Dutch mediors

Increasingly the internet is becoming a space where many daily habits can be transferred to, meaning that the diversity of activities online is growing, together with the amount of data people leave online about themselves. This paragraph aims to explore patterns in the actual behaviour of Dutch mediors online and to learn more about their online activities, online routines, level of computer and internet experience and the devices that are used to go online. By examine the most executed tasks online and retrieving more in-depth information about the purposes of their internet use, this study provides us with some insight in the hedonic and utilitarian approach towards internet use of Dutch mediors. Even though the subject about safety and privacy online was not a large part of the online survey, the focus groups participants elaborated heavily about their privacy and the safety of their personal data online, creating a substantial part in the findings of this study.

4.1.1. Statistics and correlations

On average, the respondents indicate to use the internet for approximately 20 to 15 years now ($M = 2,43$, $SD = 1,08$). A statistical moderate correlation is found between gender and the number of years someone is using the internet (Cramer's $V = 0,291$, $p = 0,023$). On average, male respondents ($Median = 2$ (20 to 15 years)) are using the internet for more years now than do female respondents ($Median = 3$ (15 to 10 years)) and men are on average also taking longer internet sessions ($Median = 4$ (1 to 3 hours)) than do women ($Median = 3$ (half an hour to an hour)). The majority of the respondents started to use the internet out of their own interests (53,7%) or because of their job (32,8%). The internet is the most often used at home (99,3%) and at work (72,4%). 97% of the respondents uses the internet daily. The most popular internet device among the respondents is the mobile phone, 64,3% of the respondents uses the mobile phone to go online on a daily basis, followed by the personal computer (59%). The most important reasons among the respondent to use the internet are to communicate with others, to retrieve information, to stay up to date about newsworthy information and to work. To play games and to pass time were the least popular reasons to use the internet. When looking at the reasons why the respondents are using the internet (to communicate with others, to

retrieve information, to stay up to date, to work, to maintain relationships, to play games and to pass time) no statistical significant correlations between age and ‘reasons to use internet’ are found and almost no statistical significant correlation between gender and ‘reasons to use the internet’ are found. When looking at the correlation between gender and the activity of playing games, a moderate statistical significant correlation is found (Cramer’s $V = 0,385$, $p = 0,001$) indicating that men (12,5% agrees or strongly agrees) agree to a lesser extent with the statement ‘*I use the internet to play games*’ than do women (38,3% agrees or strongly agrees). When controlling for age, this correlation grows stronger among older respondents, showing a strong statistical significant correlation (Gamma = 0,789, $p = 0,013$) between gender and playing games in the age group of respondents of 60 to 65 years old. Similar results are found for the correlation between gender and ‘the activity of maintaining relationships’. A small statistical significant correlation (Cramer’s $V = 0,273$, $p = 0,041$) is found, showing that women (76,6% agrees or strongly agrees) agree to a greater extent to use the internet to maintain relationships than do men (57,5% agrees or strongly agrees). Again, when controlling for age, this correlation is stronger for the respondents in the oldest age group between 60 and 65 years old, showing a strong statistical significant correlation between gender and the activity of maintaining relationships (Cramer’s $V = 0,682$, $p < 0,001$).

The respondents were asked to indicate to what extent they agreed with various statements about the internet in order to learn more about their overall attitude towards the internet. An overall positive attitude or opinion towards a certain type of technology is often related to a higher level of technology acceptance (Davis, 1989). With the twelve variables the scale ‘opinion about the internet’ is created, in which the lowest value of 1 depicts a very negative opinion of the internet and the highest value of 5 a very positive opinion of the internet. The twelve variables together compose a reliable and valid scale (Cronbach’s $\alpha = 0,861$, Eigenvalue: 5,31). The 134 respondents have a fairly positive opinion of the internet ($M = 3,98$, $SD = 0,43$). The 40 male respondents ($M = 4,03$, $SD = 0,38$) in the survey were slightly more positive in their opinion of the internet compared to the 94 female respondents ($M = 3,96$, $SD = 0,45$). A moderate correlation between gender and ‘opinion of internet’ is found ($Eta = 0,504$; $Eta^2 = 0,25$), meaning that the difference in ‘opinion of internet’ is for 25% explained by the difference in gender. No statistical significant correlations are found between the ‘opinion of internet’ and age. A moderate negative statistical significant correlation is found between the number of years someone is making use of the internet and the opinion of the internet ($r_s = -0,241$, $p = 0,005$), indicating that respondents who are using the internet for a smaller amount of years have a less positive opinion of the internet than respondents who are using the internet for a greater amount of years. Included in the scale ‘the opinion of internet’ is the variable ‘I perceive the internet as safe’. The large majority of the respondents did answer this question by stating that they are ‘neutral’ (61,2 %) and even parts of the respondents either agreed with this statement (18,7%) or disagreed with the statement (20,1%). No statistical significant correlation between this variable and gender or age are found.

4.1.2. Focus groups

Practical or entertaining?

The participants of the focus groups all indicate that, when they have to choose, they find the internet a very practical tool instead of something entertaining. M1, MGM2 and F3 state to never use the internet for fun-purposes. All participants indicate that when going online they always have a goal or purpose to use the internet, knowing in advance what kind of information they need and how they are going to obtain this. Both some female and male participants state to never use the internet to ‘surf around’ or ‘pass time’ (F1, F3, F4, M1, MGM1, MGM2, MGF2). Only F2 states that she does grab the iPad now that she has one, to kill a couple of minutes when she needs to by reading the newspaper online or playing a mini game. When the discussion about the activities that are executed online develops, it shows that every participant uses the internet for entertainment purposes every now and then. Even though the participants indicate to always go online with a certain goal in mind (checking email, searching for information, checking their profiles on SNS) F4 claims that she often gets distracted when browsing the internet by advertisements or links that appear in sidebars or text and therefore always spends more time online than she initially intended to do. MGM2 elaborates on how he perceives the internet as a practical tool to execute his hobby more easily, because the amount of sources and products online is larger and much quicker available than offline sources such as books in the library or products bought in the store. That opinion is shared by F2, M2, M3 and MGM1. F3 at first states that she never uses the internet for fun but later on clarifies that she only uses her laptop for work purposes and often uses her tablet for fun purposes such as reading the newspaper and watching television online, as if there appear to be two different types of internet.

F3: *“I will not go sit behind my laptop to re-watch some television show. I never use my laptop for fun purposes. I now have an Ipad on which I can do fun stuff such as watching television.”*

Similar, M1 does not seem to relate the internet on his personal computer or mobile phone to the internet on his television by stating that he never uses the internet for fun, but later on elaborates on how he loves to browse music videos and video clips on his television via YouTube.

The perception of privacy

Also during the focus groups, the aspect of privacy online was discussed by the participants. Especially the participants who are non-SNS-users, had a typical perception of online privacy. There are two participants who did not use SNS at all and they both stated that they did not feel the need to share information about their lives or their current activities with others.

MGF2: *‘I don’t feel the need to know all sorts of useless information about people and even more I don’t want to share such information about myself with other people. Using SNS would give me a sense of being too much available for people, which would make me feel uncomfortable. When friends or relatives want to know something about me, people should just call me.’*

F4: *'I rather choose for myself with whom I share specific information and therefore only use my phone and email to communicate with social contacts.'*

Further on in the conversation, F4 elaborates on the fact that even though she is not a SNS-user, other people still share information about her. Furthermore, she states that she is worried about the easiness with which information on Facebook gets shared. She is aware of the fact that every status update or photo can be shared by other SNS-users who read it and that information therefore can travel around fast online. She has a fear for the limitless of the internet and the lack of control she has over it.

Out of the five male participants and six female participants that joined the focus groups, four men and one woman were users of the business SNS LinkedIn. Remarkably, all four men indicated that they made very little use of the SNS and only accepted friend requests instead of actively searching for connections. The one female user states that, business-wise, she is a very active LinkedIn user. F3 finds LinkedIn a valuable tool to get in contact with people just outside her own network and often uses the service for this matter. The four male users indicate that they do not need the service in that way because they are sufficient with their offline network and rather communicate with others face-to-face or by phone. When asking the participants whether they have ever played a game online with someone they did not know, or if they would be willing to do so in the future, all five men answered that they didn't have interest in that. However, three out of six women answered that it did happen once when playing Wordfeud or Candy Crush but that they would not do it again in the future. Nevertheless the women do not feel the need to do it again (F2), think that playing a game against someone familiar is more fun (F1) and also think that strangers online have more in mind than just playing games (F3 and F4).

F3: *'When playing Wordfeud with a stranger, someone could send you tacky or inappropriate words! Who would want that on his phone?'*

In an article about walled gardens online and the perception of privacy when using the internet Arora (2012) quotes Hunter (1985), who predicted decades ago that the revolution in privacy would not be in gathering data but rather in analysing the data that is voluntary shared by internet users. It is interesting to see that the participant of the focus groups are very well aware of that fact that they willingly share a lot of their personal information or private lives on the internet. For M2 it is a reason to not use SNS often, less than once a day, and to never share information himself but only read the information others are sharing. However, M3 states that it does not bother him that people read about him on Facebook, since he is responsible for what is put out there. F2 elaborates on how she is constantly checking her Instagram-account when she has uploaded a picture, to see whether her 'followers' liked her picture or left a reaction, indicating that she might be looking for some sort of approval of her followers. F3 is comfortable sharing information or her opinion on Facebook or Twitter but is, just as F4, somewhat scared of the easiness with which others can share information

about you such as photos of you having too much to drink at a party. The participants also seem to be aware of the ways in which information about them gets saved. F2 finds it irritating that because of the cookies that are saved on her computer, personal advertisement appears when she visits certain websites. She notices that advertisement appears of websites she visited earlier and started to delete the cookies because it irritates her so much that everything she does online is tracked and saved. F3 indicates that she finds it offending that even though Google ‘knows’ her age, because she has a Google-account, she still receives advertisement about funeral insurances, Tena Lady and stair lifts. Just as stated by Szmigin and Carrigan (2000) the discrimination of age and the stereotyping of people reaching the age of 50 makes her feel very uncomfortable and gives her negative thoughts about her current age. F1 is worried about the trustworthiness of the information that can be found on Google, she states when talking about searching for health information online. She sees Google as a commercial organization and is aware of the fact that companies pay Google to appear high up in the search results, diminishing the reliability of the search engine.

4.1.3. Analysis

Overall, Dutch mediors seem to have a positive attitude towards the internet in general. The focus groups participants all indicate that they always have a purpose or goal when going online to use the internet and very often manage to fulfil their needs, indicating that there is a high level perceived usefulness among the focus groups participants (Pan & Jordan-Marsh, 2010). Men and women perceive the internet as a mainly practical tool and even though the participants of the focus groups unwittingly indicate to also execute many activities for entertainment purposes online, somehow the use of internet for entertainment purposes is perceived different by the participants. Even when participants state to use the internet for hobby purposes, the internet is regarded as a more practical tool to perform their hobby. When talking about the use of SNSs those platforms are perceived as a practical tool to maintain relationships, replacing for example the telephone or email. When looking at the either hedonic or utilitarian approach towards the internet, both results from the survey as from the focus groups show that women tend to have a more hedonic approach then do men. Female participants seem to be more active in communicating online with others, maintaining relationships through email and SNS and more frequently play games online. Playing online games is often considered a male dominant activity online (Helsper, 2010), but in this study was defined as playing any type of game using the internet, including mini games on Facebook and mobile phones, often including social interactivity and communication, which are considered typically female dominated online activities (Helsper, 2010). When controlling the correlations for age the correlations tend to become stronger as the respondents are older. In accordance with earlier research these results show that middle aged internet users have a more practical approach towards the internet as do younger and older internet users, just a men do compared to women (Duimel, 2007; Helsper, 2010). Besides having a more practical approach towards the internet, men might also be more confident about their internet

use, leading to a more positive opinion of the internet in general, however no significant differences between gender were found. This is supported by data obtained from the focus groups since female participants elaborated more often on being afraid of doing something wrong when using the internet compared to male participants. It is interesting to see that both the participants of the focus groups and the respondents in the survey, regardless of their somewhat older age and less experience than the average internet users, are very aware of the privacy issues that emerge when using the internet on a frequent basis and when leaving personal information online. They do not seem naïve when talking about the risks of leaving personal data online and they seem to know how the information that is being saved about them online, influences their browsing behaviour (F2, F3).

4.2. Shopping online and reading online reviews

Being said that the Dutch middle aged class is currently the wealthiest class of the population and looking at the growing interest and importance of online shopping in today's economy there's explored if and how often Dutch mediors shop online, what products or services they are buying online and how important they perceive the available online reviews of products and services.

4.2.1. Statistics and correlations

No significant strong correlations are found between the frequency of online shopping and age (Gamma = -0,177; p = 0,058) or gender (Gamma = -0,023; p = 0,875). However, some significant strong or moderate correlations are found between the frequency of shopping online en the frequency of searching online for products and product reviews (Gamma = 0,593; p < 0,001), searching for information on fashion and beauty (Gamma = 0,549; p < 0,001) and searching for information on travels (Gamma = 0,365; p = 0,001). These correlations indicate that the more the respondents tend to shop online, the more time they spend online searching for information on products and reviews, fashion and beauty and travels and vice versa. When controlling these correlations for both age and gender, more significant and strong correlations were found, as can be seen in the tables below.

			Correlation	Significance
Online shopping*Searching for product (reviews)	Gender	Male	Gamma = 0,685	p < 0,001
		Female	Gamma = 0,545	p < 0,001
		Total	Gamma = 0,593	p < 0,001
	Age	45-49	Gamma = 0,498	p = 0,008
		50-54	Gamma = 0,6	p < 0,001
		55-59	Gamma = 0,711	p < 0,001
		60-65	Gamma = 0,727	p < 0,001
		Total	Gamma = 0,593	p < 0,001

Table 4.2.1. Frequency of shopping online*Frequency of searching for information on product (and reviews), controlled for gender and age.

When controlling for gender between the frequency of online shopping and searching for products and reviews, the correlation is significantly stronger for the male respondents (Gamma = 0,685; p < 0,001)

as it is for the female respondents (Gamma = 0,545; $p < 0,001$). The correlation also is significantly stronger for the older respondents as it is for the younger respondents.

			Correlation	Significance
Online shopping*Searching for travels	Gender	Male	Gamma = 0,495	$p = 0,003$
		Female	Gamma = 0,312	$p = 0,020$
		Total	Gamma = 0,365	$p = 0,001$
	Age	45-49	Gamma = 0,531	$p = 0,007$
		50-54	Gamma = 0,504	$p = 0,002$
		55-59	Gamma = 0,254	$p = 0,258$
		60-65	Gamma = -0,017	$p = 0,960$
		Total	Gamma = 0,365	$p = 0,001$

Table 4.2.2. Frequency of shopping online*Frequency of searching for information on travels, controlled for gender and age.

Also when controlling for gender between the frequency of online shopping and the frequency of searching for information about travels, the correlations is significantly stronger for the male respondents (Gamma = 0,495; $p = 0,003$) as for the female respondents (Gamma = 0,312; $p = 0,020$). When controlling for age, the correlation between the frequency of shopping online and the frequency of searching for information on travels is becoming weaker, indicating that the older the respondents are the weaker is the correlation between the frequency of shopping online and the frequency of searching on information about travels.

			Correlation	Significance
Online shopping*Searching for fashion and beauty	Gender	Male	Gamma = 0,769	$p < 0,001$
		Female	Gamma = 0,573	$p < 0,001$
		Total	Gamma = 0,549	$p < 0,001$
	Age	45-49	Gamma = 0,462	$p = 0,016$
		50-54	Gamma = 0,342	$p = 0,062$
		55-59	Gamma = 0,703	$p < 0,001$
		60-65	Gamma = 0,559	$p = 0,105$
		Total	Gamma = 0,549	$p < 0,001$

Table 4.2.3. Frequency of shopping online*Frequency of searching for information on fashion and beauty, controlled for gender and age.

Similar to the two other correlations mentioned above, the correlation between the frequency of online shopping and the frequency of searching for information on fashion and beauty is significantly stronger for the male respondents (Gamma = 0,769; $p < 0,001$) as it is for female respondents (Gamma = 0,573; $p < 0,001$). When controlling for age, the correlation turned out to be the strongest for the age group of respondents between the age of 55 and 59 (Gamma = 0,703; $p < 0,001$).

The strong correlations for male respondents between the frequency of shopping online and the frequency of searching online for information about products and services is in accordance with results from earlier research showing that men, compared to women, are the most active and frequent online shoppers (Helsper, 2010).

Besides researching the topics the respondents are searching information about online, it is all so researched what online tools they are using to retrieve this information.

	Total	Male	Female
Search engine	94,2%	95,1%	93,9%
SNSs	36,7%	39%	35,7%
Website	43,9%	36,6%	46,9%
Online platform	9,4%	12,2%	8,2%
'Startpagina.nl'	23%	22%	23,5%

Table 4.2.4. Tools to retrieve information online

As can be seen in the table above, the search engine is among both men and women the most popular tool to retrieve information. When asking the respondents which search engine they are mainly using in an open question, 123 respondents (N = 125) answered 'Google', making this the most popular search engine in the sample. Female respondents answered to go to needed website directly more often than did men and one third of the respondents indicated to also use SNSs to ask their connections for more information.

4.2.2. Focus groups

During the focus groups, shopping online and reading reviews online before buying a product or visiting a specific location were discussed extensively. At first when the participants were asked whether they shop online, all participants answered that they never or rarely did. However, further on in the discussion it appeared that participants were buying films, apps (applications on internet devices) and music online (M1), tickets to recreational activities on an online ticket auction (M3), computer parts and accessories (M2) and to a greater extent vacations and trips, clothing and books (F1, F2, F3, F4, MGF1, MGM1). Especially the purchase of apps, music and films and making travel reservations was not perceived as shopping at first by various participants (M1, M3). The participants in the female focus group indicated that they rarely ordered clothing online. F2 stated that she preferred to actually go out to go shopping together with her daughters or friends and views shopping as a leisure activity. F1 agrees with F2 and elaborates on how she finds it inconvenient to order multiple sizes of one piece of garment and having to send back all the pieces that she does not want to buy.

All female participants (F1, F2, F3 and F4) are familiar with booking trips online and indicate to read online reviews about locations and accommodations before making a reservation. MGF1 and MGM2 both claim when booking a trip or vacation they start searching on the internet but soon get lost in the endless list of possibilities and therefore end up booking their trips at a traditional travel agency. MGM1 agrees with them that he does not see the fun in searching online every night to find the perfect holiday deal, when the people at the travel agency have all the information ready and find you a great deal in no time. M1 indicates that he, when booking an accommodation, always starts by looking at the accommodations that have the best average review and then decides which accommodation meets his needs at its best.

Except for M3, who claims never to read any reviews before visiting a place because he is always visiting the same places, all participants were active readers of online reviews, especially about locations, holiday spots and restaurants. However, not all were similar positive about the use and effect of the online reviews. MGM2, M2, M1 and MGF1 all agree upon that online reviews about restaurants are often a snapshot of the quality of a restaurant. MGM1 elaborates on how he perceives people who post negative online reviews about a restaurant as double negative.

MGM1: "I always think when reading negative reviews about places that people who write such things should have very negative minds, but than taking the time to write it all down and post it online makes someone, in my opinion, double negative."

Asking them how much they are influenced by the reviews they are reading online, the participants have both shared and differing opinions. MGM1 immediately states that he gets positively influenced by enthusiastic reviews about a certain restaurants. On the other hand he feels like negative reviews do not influence him that much, because he immediately questions the sincerity of the writer. MGM2 on the other hand, indicates that he does not feel influenced by either negative or positive reviews.

MGM2: "When I look at reviews that are written about restaurants that I am familiar with, I often disagree with what has been written down. It is clearly a snapshot and strongly influenced by someone's mood or opinion."

While the male participants mostly only use online reviews to read about restaurants, the female participants are searching for online reviews in a broader range of products. Especially holiday spots, hotels and other forms of location-reviews seem to be often used when having to make a decision. Contrary to what MGM1 stated, F2 states to believe that she is heavily influenced by negative reviews than by positive reviews.

F2: "Bad publicity, that I find such a let-down."

Among women, besides having negative reviews on a website also the number of negative reviews seems to influence their decision-making process. F3, F2 and F4 all agree upon that they will look for other hotels that might satisfy their needs if the hotel has more than three negative reviews on a website. When F3 elaborates on the level of hygiene of a hotel, a factor that she indicates as very important when booking a hotel, she states that she would never go to a certain hotel if five reviewers mention a low level of hygiene in the hotel. F3 is the only participant to talk about the demographics of the reviewers, when searching for locations. She states to identify stronger with younger adult couples who are vacationing without kids, than with senior couples.

When asking why the participants tend to search for online reviews about places they might be visiting, the overall answer turns out to be that the participants like the idea of being somewhat prepared about where they might end up. Or as F2 states it, to learn where you should not go if you

want to avoid certain things from happening. To the question whether the participants would choose an online review over the review of a friend or relative, F2, F4 and F1 immediately state that they would always choose the opinion of a friend over a review of someone they are unfamiliar with. Only F3 is doubting this and indicates that it certainly depends on the level of expertise of the friend, compared to the person who gives the online review. MGM2, MGF1 and MGM1 all indicate that instead of reading online reviews they rather go see an expert immediately, such as going to a travel agency when booking a trip.

4.2.3. Analysis

Overall it can be said that men are more active in both online shopping and online ‘window shopping’, reading product reviews and searching for price comparisons on the internet, even though they seem unaware of the fact that buying apps on a mobile phone or paying money to watch a film online are considered online shopping. Similar to what was stated in the literature, female participants and respondents shop online less than men do (Helsper, 2010). Female participants of the focus groups state that going on a shopping spree is considered as a fun, social and leisure activity whereas online shopping is seen as more practical and less fun. This view on the activity of shopping matches Scarpi’s (2011) statement, claiming that offline shopping is perceived as more hedonic where online shopping is perceived more instrumental and utilitarian. Even though Scarpi (2011) does not elaborate on gender differences regarding a hedonic or utilitarian approach towards shopping, female participants in this study tend to have a more hedonic approach towards shopping in general than men do and therefore seem less active in online shopping. In accordance to the literature (Zickurh, 2010; Mack et al., 2007), the focus groups participants seem active readers of online product reviews. Especially reviews about locations such as restaurants and hotels are of great interest to the Dutch mediors. No expectations about gender differences regarding the influence of online products reviews were made, but female participants of the focus groups seem to read online reviews more into detail and also to be stronger influenced by it, especially by negative comments and reviews. Looking at the rather small sample of focus groups participants no assumptions can be made but it would be interesting for further research to pay more attention to gender differences regarding online reviews and whether differences emerges when controlling for different product categories. Earlier research state that men are more active online ‘window shoppers’ than women, comparing various prices and products online. However in this study it seems like women are more active ‘window shoppers’ when looking for locations to go out for dinner or go on vacation. Nevertheless do most of the participants agree that online reviews will not be chosen over the advice of a friend or an expert, indicating that the importance of strong ties versus weak ties and expertise versus amateurism is also present in this particular age group, showing that again the large amount of online reviews on such a variety of products does not beat the traditional word of mouth (Mack et al., 2007)

4.3. Searching for health information online

As from the age of 45, natural physical decline in for example hearing, vision or motion sense can start happening. Furthermore, mediors are in a stage in which they are likely to become caretakers of for example needing parents, partners or grandchildren. In studies about the online search activities of American internet users, searching for information on personal health and healthcare is one of the most popular search terms. Considering the differences between the American and the Dutch society regarding the social healthcare system it is researched how much time and effort Dutch mediors spent on searching for health information online and how valuable they perceive the information online compared to offline sources.

4.3.1. Statistics and correlations

In general, it can be said that the respondents perceive their overall health as good. Only five per cent of the respondents would rate his or her health as 'bad' or 'fair', against ninety five per cent who would rate his or her health as 'good' or 'sufficient'. Almost none of the respondents reported to experience any physical problems when using the internet such as decline in vision, hearing or motion.

Physical condition	Yes	No	Total
Decline vision	2,9%	97,1%	100%
Learning difficulties	0%	100%	100%
Motion problems	1,4%	98,6%	100%
Arthritis	3,6%	96,4%	100%
None	92,8%	7,2%	100%

Table 4.3.1. Survey question (Q10): Are any of the following conditions influencing your internet usage? Multiple answers are possible.

Perception of health	
Good	76,3%
Sufficient	18,7%
Fair to bad	5%
Total	100%

Table 4.3.2. Survey question (Q46): How would you perceive your current health condition?

A significant strong positive correlation was found between searching online for information on personal health and searching online for information about the health of relatives ($\text{Gamma} = 0,722$, $p < 0,001$), meaning that the more one searches online for information personal health, the more one will also search online for information about the health of relatives and vice versa. Searching for health information is somewhat negatively correlated with age. A weak negative correlation is found for searching for information on personal health and age ($Y = -0,159$), meaning that the younger the respondents are, the more they are searching for information on personal health and vice versa. A significant moderate negative correlation is found between age and searching for information about the health of relatives ($\text{Gamma} = -0,323$, $p = 0,001$), meaning that the younger the respondents are, the more they are searching for information about the health of relatives and vice versa. No correlations are found between the perception of health or searching for health information online and gender.

4.3.2. Focus groups

During the focus groups, the participants were asked whether they ever searched for information about health or healthcare online and if so, how often this was the case. Most participants first indicated that they never executed such activities, as they believed they were in good health or because they felt to have more reliable resources offline. However as soon as the discussion about this topic started to emerge, participants often adjusted their first answers or started to think of situations in which they could be searching for health information online. MGF2 at first indicated that she never searches for such information online because she is a trained nurse and has a lot of information ready to use or available at work. Nevertheless she starts adjusting her opinion when MGF1 elaborates on how she has been searching for information on a disease her daughter suffered from, when she felt that the doctors and specialist did not give the sufficient answers or were not sure what the next steps needed to be. Even though MGF2 has not been in a comparable situation ever, she thinks she could use the internet to search for more or alternative information on specific health issues since the internet is such a large source with relatively easy access. Other participants, all women, also indicate that they regularly search for health information for friends and relatives, either to learn about specific conditions a friend or relative is suffering from or to search for help or alternative solutions. F4 elaborates on how she is frequently searching online about a condition her brother is suffering from and F2 immediately picks up on that by stating that she has even been searching online about a condition her friend's brother was suffering from. Both F2 and F4 think that they are searching for this kind of information out of curiosity, to gain some background information and to be somewhat prepared for the future. To be prepared for the future and to gain some background information both have been reasons for MGM2 to extensively search online for information about his own condition when he was hospitalized because of a serious back injury. Even though he agrees on having received the best care from medical specialists, he also thinks that one in general would be curious about prognoses, stories from peers and alternative cures in order to be somewhat prepared for what can be coming up next. On the other hand, MGM2 also elaborates on how he is sometimes searching on the internet for conditions that meet his symptoms before going to see the house doctor, to be well prepared before talking to the doctor. Both M1 and M2 indicated that they are doing this as well, nevertheless the sample of the focus groups is too small to state that this phenomenon of verifying diagnoses and symptoms online is specifically related to the age or life stage of the Dutch mediors or just a development that comes with the growing amount of information that is available online. Besides MGF2, who has many knowledge about health and healthcare ready at hand because of her profession and therefore doesn't search much for information online, also F3 and MGM1 indicate that they would never search for information about their health online. Both of them are afraid of reading frightening stories about rare diseases or conditions and learning things you do not want to know about. Because the internet is such a large and easy-access platform of information, several participants question the trustworthiness or reliability of the information that can be found online. F1

is worried about the commercial deals Google has with organisations to let their information appear high up in the search engine, lowering the reliability of the search engine in her opinion. F3 states that especially for information on health, she refrains from online sources and searches for offline sources in her social environment or will go see her house doctor, because she finds it difficult to trust the information online about something as important as her own health. F4 is aware of the low reliability of the information and will therefore only use it as a form of background information just like M1, who believes that the internet can help to give you a more complete view on certain situations. Nevertheless, all participants of the focus groups revealed that they would always choose the opinion of specialist or doctor above the information that can be found on the internet.

The importance of a healthy lifestyle

Another aspect of searching for information about health and healthcare, which has been discussed during the focus groups, is the importance of having an healthy lifestyle. F1 indicated that she has a strong interest in information about healthy nutrition, so called *super foods* and the importance of being active and sportive. She actively searches for recipes in which healthy foods are included, looks up information about *super foods* such as Chia seeds and Goji berries and uses an online application on her iPhone to keep track of her running activities. M3 elaborates on how he searched for information on coconut oil after one of his friends advised him to use this oil to bake with. He used the search engine Google to find more information on this. Besides that, he states that he often reads about sports online and by doing that is stimulated to live an active lifestyle as well especially now that he is not working anymore and therefore lives a less active life and starts to gain weight more easily. F3 and MGF1 both claim that they find it important to live a healthy lifestyle, especially now that they are slowly reaching the age of fifty, but nevertheless do not search extensively for information about a healthy lifestyle online. They both agree that they find it interesting to read about it when it crosses their paths but at this moment do not search for it themselves. All other participant indicate that they are not concerned about their health or their lifestyle as long as they feel healthy. They do not elaborate on being worried about certain declines that come with ageing and do not think about preparing themselves for this or trying to postpone it.

4.3.3. Analysis

No theories about Dutch internet users and searching for information on personal health and healthcare are found during this study, meaning that the analysis in this paragraph is mainly explorative and indicates possible avenues for further research. Overall the female participants in the focus groups tend to be more aware of their declining health and the importance of a healthy lifestyle. Also, compared to the male participants, the female participants seem to spend more time and effort searching for health information for their friends and relatives, either to get more information about a condition a friend or relative is suffering from or to help find solutions or alternative cures. As can be seen in the statistical results, there's a significant positive correlation between searching for personal

health information online and searching for health information online about friends and relatives, meaning that the more people search online about information on their personal health, the more they also tend to search about health information for friends and relatives. Participants of the focus groups who never search for health information online, both men and women, are highly sceptical about the trustworthiness of the information that can be found online and indicate that they prefer to talk to an expert about something as important as their health against participants who are experienced in searching for health information online and indicate that they find it quick, extended and a good way of retrieving background information. Even though personal health is perceived as an important subject by the participants, not many participants are concerned about their current health, future physical declines and the importance of a healthy lifestyle, as they stated during the discussions. It is interesting to see that health issues are perceived as ‘too important’ for the internet, whereas the internet is used to search for all other sorts of other information and executing all sorts of activities. To learn what is perceived as too important to search for online or to do online could be subject to further research.

4.4. A sense of belonging: The use of social networking sites

Social networking sites offer their users the possibility to communicate and socially interact with each other. In this paragraph is researched whether mediors perceive the use of SNSs as leisure or as mainly utilitarian and how they adopt these new communication technologies into their internet habits.

4.4.1. Statistics and correlations

When looking at the graph below, it can be seen that 20,1% of the respondents is not using any SNSs at all. Facebook (69,8%) and LinkedIn (34,5%) are the most popular SNSs among the participants, followed by Twitter (23,7%) and Google+ (20,9%).

SNS	Yes	No	Total
Facebook	69,8%	30,2%	100%
Twitter	23,7%	76,3%	100%
Hyves	7,2%	92,8%	100%
Pinterest	8,6%	91,4%	100%
Instagram	5%	95%	100%
Google+	20,9%	79,1%	100%
LinkedIn	34,5%	65,5%	100%
Other	5%	95%	100%
None	20,1%	79,9%	100%

Table 4.4.1. Survey question (Q25): When making use of SNS, which of the following are you using? Multiple answers are possible.

As can be seen in the graph below, a higher percentage of the male respondents indicated to use information-sharing or relationship-building SNSs such as Twitter and LinkedIn, where a higher percentage of female respondents indicated to use Facebook, currently the largest SNSs in the world to

socially interact with friends and relatives online and visual-sharing SNSs such as Pinterest and Instagram. A higher percentage of female respondents (41,5%) indicated to not use SNSs at all.

Use of SNSs	Male	Female
Facebook	53,7%	76,5%
Twitter	31,7%	20,4%
Hyves	4,9%	8,2%
Pinterest	2,4%	11,2%
Instagram	0%	7,1%
Google+	9,8%	25,5%
Linkedin	51,2%	27,6%
None	26,8%	41,5%

Table 4.4.2. When making use of SNSs, which of the following are you using? Multiple answers are possible*Sex

To explore the motivations of the mediators to make use of SNSs, the respondents were asked why they are using SNSs. No significant strong correlations are found between a respondents motivation to use SNSs and its gender, as can be seen in the table below.

When looking at the percentages, the most important motivation to use SNSs for both men and women is *'to keep themselves up to date'* (Male: 61% agree; Female: 76,5% agree). The least popular motivation to use SNSs for both is *'to communicate with brands'* (Male: 46,3% disagree; Female: 61,2% disagree).

Motivations to use SNSs*Sex		Male	Female	Correlation	Significance
To communicate with friends and family	Agree	58,5%	71,4%	Cramer's V = 0,127	p = 0,340
	Disagree	17,1%	9,2%		
	I don't use SNSs	24,4%	19,4%		
	Total	100%	100%		
To maintain personal relationships	Agree	58,5%	67,3%	Cramer's V = 0,072	p = 0,705
	Disagree	17,1%	13,3%		
	I don't use SNSs	24,4%	19,4%		
	Total	100%	100%		
To maintain business relationships	Agree	53,7%	46,9%	Cramer's V = 0,122	p = 0,371
	Disagree	19,5%	30,6%		
	I don't use SNSs	26,8%	22,4%		
	Total	100%	100%		
To establish new relationships	Agree	36,6%	29,6%	Cramer's V = 0,162	p = 0,174
	Disagree	34,1%	49%		
	I don't use SNSs	29,3%	21,4%		
	Total	100%	100%		
To keep myself up to date	Agree	61%	76,5%	Cramer's V = 0,192	p = 0,084
	Disagree	14,6%	5,1%		
	I don't use SNSs	24,4%	18,4%		
	Total	100%	100%		
To communicate with brands	Agree	24,4%	16,3%	Cramer's V = 0,143	p = 0,254
	Disagree	46,3%	61,2%		
	I don't use SNSs	29,3%	22,4%		
	Total	100%	100%		

Table: 4.4.3. Survey question (Q25): Why do you use SNSs*Sex

When looking at the percentages, 71,4% of the female respondents agrees with the motivation *'to communicate with friends and relatives'* against 58,5% of the male respondents and 67,3% of the female respondents agrees with the motivation *'to maintain personal relationships'* against 58,5% of the male respondents. 53,7 % of the male respondents agrees with the motivation *'to maintain business relationships'* against 46,9% of the female respondents and 36,6% of the male respondents agrees with the motivation *'to establish new relationships'* against 29,6% of the female respondents.

When checking for correlations between the motivations to use SNSs and age, significant and positive moderate correlations are found, meaning that the older the respondents are the more they tend to positively agree with the motivations to use to SNSs and vice versa.

Motivation to use SNSs*Age	Correlation	Significance
To communicate with friends and family*Age	Gamma = 0,392	P = 0,002
To maintain personal relationships*Age	Gamma = 0,453	P < 0,001
To maintain business relationships*Age	Gamma = 0,367	P < 0,001
To establish new relationships*Age	Gamma = 0,419	P < 0,001
To keep myself up to date*Age	Gamma = 0,397	P = 0,003
To communicate with brands*Age	Gamma = 0,350	p = 0,002

Table: 4.4.4. Survey questions (Q25): Why do you use SNS*Age

4.4.2. Focus groups

Similar to the data in the quantitative data set, Facebook (F1, F3, M2, M3, MGF1) and LinkedIn (F3, M1, M2, MGM1, MGM2) were the two most popular SNSs among the participants of the focus groups, followed by Instagram (F1, F2, MGF1). Participants of the focus groups indicated that their main motivation to join SNS was curiosity after hearing about it from others. Stimulated either by friends or relatives who already used SNSs or out of curiosity to know what their children were doing on Hyves, Twitter or Facebook all the time M3, F2, F1 and MGF1 joined one of the SNSs. M3 states that he started to use Hyves about five years ago, when his grandchildren were going abroad for studies and fieldtrips and SNSs were the easiest way to keep in touch with them and view all of their photos. MGF1 is using Facebook for a couple of months now and explains that she started to use the SNSs mainly out of curiosity but also because she has a fear of falling behind in her work environment when she does not keep up with the newest developments and technologies. F3 elaborated on the possibility to easily communicate, interact and share information with friends and relatives abroad and in different time zones. Besides Facebook F3 is a member of LinkedIn, a SNS she is only using for business purposes. M2 and MGM2 are also members of the business SNS LinkedIn but both indicate to only accept new connections and never actively read the content on the website, search for information or look for new connections. MGM1 is also a LinkedIn-user and is subscribed to various business groups on LinkedIn to stay up to date about the latest developments in his fields of business. M1 is also using LinkedIn, but admits that he is mainly using it to see the new connections of his partners and competitors, instead of making new connections himself.

After having decided to start participating in SNSs, internalization plays an important role in deciding whether or not to continue to use the technology (Cheung & Lee, 2010; Xu et al., 2012). Now that F1 is using Facebook and got in contact again with school friends from her youth, that contact is a large stimulation for her to continue to use to Facebook. For M3 the use of SNS helps him to keep in touch with his grandchildren and to follow what they are doing by looking at the pictures they are uploading and the status updates they are posting, which is a strong internal motivation for him to continue to use these technologies. The same goes for F3, who finds the interaction with friends and

relatives who are moving away from her in real life the most valuable features to keep using Facebook. MGF1 indicates that after using Facebook for a couple of months, the online social network did not meet her expectations and she is already thinking about quitting to use it. Not only does she find the information that is posted on Facebook uninteresting, she also did not experience a sense of belonging to a specific group as M3 did with his grandchildren, F3 did with friends and relatives abroad and F1 with her old school friends. As stated by Cheun and Lee (2010) people are motivated to continue to use SNS when they get a sense of belonging, created by either a strong group norm with other SNS users (F1) or the conceptualization of a social identity, based on interaction with other SNS users (M3).

‘Friending’ on Facebook

MGF1 feels as if Facebook is primarily developed for the young internet users and that she is interfering into their environment by joining Facebook and inviting them to be their ‘friend’, when in real life she is their aunt, a friend of their parents or even worse, the mother of their friend. Just as MGF1, F1 also claims that she would never request a younger Facebook user to become her ‘friend’ on Facebook, because she does not want to mingle in the world of other people’s children. F2, even though she does not have a Facebook-account, agrees with F1 that she too would never invite other people’s children to be her ‘friend’. F3 states that she does interact with younger internet users but only because she finds it a light and easy way to communicate with them and because she believes that everyone has the possibility to turn down a friend request if they would like to do so. According to Ellison, Steinfield and Lampe (2011) the most common strategy to connect with other Facebook users is to ‘maintain relationships’ with people someone also has social offline ties with. ‘Maintaining relationships’ is considered a utilitarian approach of using SNS, because the main purpose of the activity is beyond the use of the website, in which the website is only used as an instrument (Scarpi, 2011). Using new technologies in the same way as older technologies were used and letting them fulfil similar functions is an aspect of the technology-generation theory by Sackmann and Weymann (1994 in Nägele & Schmidt, 2012), claiming that people will always have the highest sense of affinity with the technology that was the most popular during their twenties. Adoption of the technologies that will be developed afterwards will always be linked and compared to this earlier type of technology. According to Ellison et al. (2011) the adoption of Facebook as a tool to maintain personal relationships could therefore be compared to the use of a telephone.

Digital migration

MGF1 elaborates on the digital divide that exists between young and older internet users and how older internet users are often following the young and early adapting internet users, thereby disturbing the ‘adult-free’ environment that youngsters had created online. M3 revealed that he is following his grandchildren and their friends to new SNSs. About two years ago, M3 noticed that many of his ‘Hyves-friends’ were abandoning Hyves and moved to Facebook, resulting in less interaction and

updates on his Hyves-profile. Since he did not want to miss out on all the fun and wanted to feel closely connected to his grandchildren and their friends he joined Facebook and started to rebuild his social network. It is supported in research by Duimel (2007) that younger internet users can be seen as the early adaptors and that older age groups follow at a slower pace. Furthermore, a recent study by Pew Research Centre (2013) revealed that American teens indeed expressed that they are starting to use Facebook less often than before and are migrating to other SNS such as Twitter and Instagram because less adults are present on those SNSs. It would be interesting to delve deeper into this phenomena of digital migration and to learn more about the process of young and old internet users, looking for their own digital environments and a sense of connectivity in the digital sphere.

Reconstruction of youth

After hearing F1 talking about how Facebook helped her reconnecting with her old school friends and noticing how that story motivated F2 to maybe create a Facebook-profile as well, it came to mind that SNS might help adults to relive certain events of their past. I started looking at the pictures of Facebook-users between the age of 45 and 65 that I had access to and noticed that many of them are uploading photos from their youth or recent photos with friends from their youth, tagging each other and leaving comments such as: ‘You did not change at all!’ and ‘You were so cool back then!’. Even though it is beyond the scope of this research it might be an interesting angle to look at into in more detail later on when studying the use of SNS by adults.



Figure 4.1: Screenshot of two old school friends meeting again at a high school reunion, receiving a comment that the two women did not change at all.



Figure 4.2: Screenshot of an old picture uploaded on Facebook, receiving comments such as 'You were pretty cool' and 'You were so handsome'.

4.4.3. Analysis

Just as stated in earlier research, Dutch mediators cannot be seen as early adopters of the social media technologies (Hanson, 2009). As indicated by Cheung and Lee (2010) the subjective norm can be seen as an important motivator to start using SNS, as focus group participants elaborate on how they started using SNS out of curiosity after seeing children, friends or colleagues use SNS. A large majority of the survey respondents indicates to actively use SNS at this moment. Even though there appear to be no significant or strong correlations between gender and the use of SNS, some aspects of the use of SNS do slightly differ between men and women. When looking at the textual data coming from the focus groups, women tend to have a more social approach towards using SNS whereas men seem to have a highly utilitarian approach towards the use of SNS. This is also reflected by the quantitative data where men outnumbered women in the popularity of Twitter and LinkedIn, two SNSs that are focused on sharing information and women outnumbered men in the popularity of Facebook, Hyves, Instagram and Pinterest, SNS focused on social interaction and sharing visuals and could be perceived as leisure. Nevertheless, female SNS users indicate to use the more hedonic SNS as Hyves, Instagram and Pinterest mostly practical, in order to maintain relationships and be up to date about the events their friends are participating in. The male participants in the focus groups indicated to use SNSs only for business purposes and even then were not very active users (M1, MGM1, MGM2). Female participants often joined SNSs out of curiosity and mainly use is to interact with social contact that also exist offline (F1, F2, F3, MGF1). According to Cheung and Lee (2010) the use of SNSs is often stimulated by feeling a shared identity or having the feeling to belong to a certain in-crowd or group. This is also very well indicated by most of the female participants and one male participant of

the focus groups. They joined SNSs to communicate with friends and relatives abroad (F3 and M3), motivated by their children or friends (F1, F2 and MGF1) or out of curiosity to see what they would miss if they did not join SNS. It is in accordance with previous literature that women do connect more and in general make more use of computer mediated communication (Kimbrough et al., 2013), however gender differences in the motivations to use SNS could be subject to further research. Something that was not indicated in the previous literature but what the focus groups participants elaborated on during the discussion, is the existence of certain digital spaces that seem to be related to specific generations. Especially the female participants of the focus groups, both SNS users and non SNS users, discussed how they felt like they are mingling into their children's 'environments' when joining Facebook and friending them. According to them, Facebook is a digital space that is primarily used by the youth to communicate and interact with each other and the focus group participants strongly feel like they are interrupting their environment. Similarly, a recent study by the PEW American Research Centre (2013) revealed that American teens indicate to leave SNS like Facebook and move to less popular platforms as Twitter and Instagram because less adults are present on these platforms. This process of digital migration should be subject to further research.

4.5. Usability of websites

In this paragraph is analysed whether Dutch mediators find the internet and websites in general easy to use and which features of the internet and website they like and do not like. Possible differences between men and women and differences because of age are explored and explained.

4.5.1. Statistics and correlations

Respondents were asked to indicate to what extent they agree or disagree with the statements about the usability of websites in general, value 1 to indicating strong disagreement and value 5 to indicating strong agreement. A large majority of the respondents agrees or strongly agrees with the statements that websites in general are clear (85,8%), logical (79,1%), easy to use (89,6%) and fit the needs of the respondents (72,4%). A small majority of the respondents agrees with the statement that is easy to understand the overall message of websites (56,7%) and with the statement that it is difficult to use websites that are written in a language other than their mother tongue (54,5%). 33,6% of the respondents agrees to the statement that there should be more websites who appeal to their needs. A small significant correlation is found between the variable '*it is difficult to use websites that are written in foreign language*' and gender (Cramer's $V = 0,281$, $p = 0,032$). 57,4% of the female respondents agrees or strongly agrees with this statement, against 47,5% of the male respondents who agree or strongly agree with this statement, indicating that women find it more difficult to read websites in a foreign language than do men. A moderate positive significant correlation is found between gender and the variable '*it is difficult to keep up with the on-going developments online*' (Gamma = 0,351, $p = 0,005$), indicating that being female is positively correlated with agreeing or strongly agreeing to the statement. Other small negative significant correlations are found between the

variables ‘websites in general are clear’, ‘websites in general are logical’, ‘it is easy to understand the overall message of websites’ and ‘websites in general fit my personal needs’ and age.

	Correlation	Significance
Websites in general are clear*Age	Gamma = -0,242	p = 0,032
Websites in general are logical*Age	Gamma = -0,246	p = 0,020
It is easy to understand the overall message of websites*Age	Gamma = -0,270	p = 0,009
Websites in general fit my personal needs*Age	Gamma = -0,260	p = 0,011

Table 4.5.1. Survey question (Q31): What is your opinion on websites in general*Age.

Those correlations indicate, even though the numbers are small, that the older the respondents are the lesser they tend to agree with the statements above. With the variables ‘websites are clear’, ‘websites are logical’, ‘websites are easy to use’, ‘it is easy to understand the overall message of websites’ and ‘websites fit my personal needs’ the scale ‘opinion about websites in general’ is constructed. The reliability of the scale is strong (Chronbach’s Alpha = 0,880) and cannot be improved by deleting one of the five items and the five items together construct a valid scale (Eigenvalue = 3,40). The value of this scale ranks between 1 (strongly disagree) and 5 (strongly agree). A single linear regression analysis shows a small negative significant correlation between ‘opinion about websites in general’ and age ($R = 0,243$, $p = 0,005$). The extent to which respondents have a positive opinion about websites in general diminishes when the respondents become older ($B = -0,033$, $SD = 0,012$, $Beta = -0,243$). Having a certain age explains for 5,2% the variance in ‘opinion about websites in general’ (R square = 0,052), meaning that 94,8% of the variance is explained by variables other than age.

4.5.2. Focus groups

The usability of websites is tested and discussed by letting the participants browse the internet on an internet device. The participants are asked to look at the website of WelkomLife in particular but are also free to show websites or features of their preferences to the other participants in the room. From the answers the participants gave during the discussion, it shows that they perceive themselves as skilful when using the internet. They are not afraid or hesitating to try new online technologies such as SNS, however they do indicate that they only use the technologies and features that they are absolutely comfortable with. M3 for example indicates that he is afraid of clicking on anything that is written in English, because he does not speak the language and is afraid to do something wrong. MGF1, claiming to be rather new on Facebook, states that she is often afraid to invite the wrong people to become her friend and therefore avoids having to do many mouse clicks on Facebook, just reading her timeline instead. When asking the participants to browse through the WelkomLife website and discuss the features of the website they like and do not like, all participants state that they are overwhelmed (in a negative way) by the amount of choices the WelkomLife website has to offer. Because of the many photos that appear on the homepage of the website, participants who have not

used the website before get confused and are not sure where to click, resulting sometimes in not clicking on anything and leaving the website immediately.

MGM2: *'Can I be very rude? I can tell immediately that this is a website where I will never return. Looking at the photos, I will find nothing of my interests here.'*

MGM1: *'You want to click it all at the same time, which makes that you don't click on anything because it's hard to decide what to click first.'*

MGF1: *'The website doesn't guide you anywhere, you should know in advance what you would like to read. It is hard to make up your mind on a website who is so crowded.'*

M1: *'Looking at the homepage I see 1,2,3,4,10,15 images screaming for my attention. I will never find the time to read it all so it's more a matter of luck, for a brand advertiser for example, that your article gets sufficient attention.'*

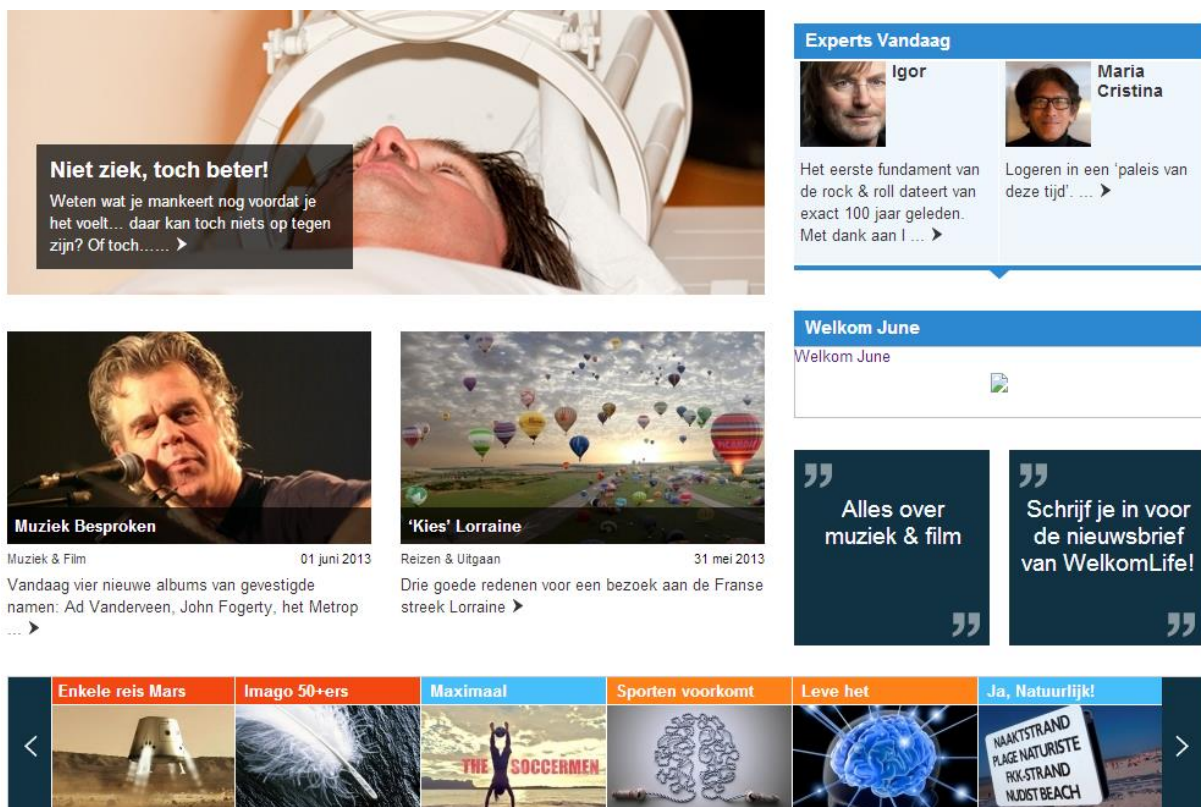


Figure 4.3: The WelkomLife homepage of June 2, 2013, offering around fifteen photos and images to choose from.

When asking the participants which websites they do visit often and of which they do appreciate the look and feel, news website are called by many of the participants. Telegraaf.nl and AD.nl [Dutch newspaper websites] (F2), Nu.nl [Dutch newswebsite] (F1, M1, MGM1), Klikklak.nl [Dutch newswebsite] (M3), CNN.com (F3), Tweakers.net [Dutch newswebsite on ICT] (M2). What most of

the participants indicate to specifically like about these websites are the news value of the articles, the clarity of the website, fast downloading time (especially Nu.nl) and the clear titles that help them immediately to judge whether the information in the article is valuable to them. For F3, that was also one reason not to click on the photos on the WelkomLife webpage.

F3: 'Photos make me curious, but they don't assure me that I will find what I was looking for. Therefore I find it hard to judge whether it is worth clicking on. With textual titles I find it way more easy to tell in advance what is in it for me.'

M1, who was not participating in the same focus group as F3, stated the exact same. The participants in the mixed focus groups elaborated on how the WelkomLife website came across as a sort of magazine or tabloid and how they would never intent to use the internet for reading such websites. According to MGM1 and MGF1 a website such as WelkomLife is a website to visit when all the needed activities are executed and there is still some time to kill. However 'passing time', just browsing the internet without a goal to kill some time, is not a strong motivation to use the internet for both the survey respondents as the focus groups participants. MGM2 and M2 state that it is unlikely that they will voluntary visit the website again, whereas F1, F2, MGM1, MGF1 and MGF2 indicate that they might stop by this website again when surfing around on the internet, even though it does not happen often. Another aspect of websites that some of the participants indicated to like is the use of colouring to guide visitors through the various categories. MGF1 stated that she got used to this because this is how the intranet on her workplace works and she finds it very clear and attractive.

Also M1 showed a website on which every colour is linked to a certain category on the website, explaining that he feels like it provides the visitor with a clear overview and that it is easy to navigate.



Figure 4.4: Example of a website on which every colour corresponds to a specific category throughout the website.

Something that many participants did not like about the WelkomLife website was the need to become a member to have access to all web content, for example the special deals. In the focus group with all female participants, the overkill of unwanted emails was called as one reason not to subscribe to many websites. Newsletters are perceived as junk mail, marketing or advertisement tools and therefore experienced as pushy. M3 also states that he reads a digital newsletter when he just became a new member, but as soon as they don't offer him any amusing or needed information he stops opening the incoming newsletters. MGM2 claims that his email inbox is already so full of junk that he stopped caring about unwanted email. What he finds irritating is that it is almost impossible to unsubscribe from unwanted newsletters. MGF1 and MGM1 agree with him on that point. Besides the high amount of unwanted email, some of the female participants are also hesitating to leave their information online on any website on the internet. When browsing through the WelkomLife website, M2 also notices that he cannot access all the information without subscribing to WelkomLife but he elaborates on how he would not subscribe to WelkomLife because the personal advantages are not made clear, or are not big enough in his opinion. M1 is with him on this, stating that special deals can be found anywhere on the

internet without being subscribed.

On the WelkomLife website, banners are used to advertise special deals and promote information about partners. Just as in other studies about the usability of websites, the use of banners is not found very popular among the participants (Breed, 2013). Especially the female participants indicate that they find the waiting for the wanted information annoying. On the other hand, when a banner has nothing interesting to offer it is not experienced as annoying because the participants do not read it or wait for it. When talking about advertisement online in general, it became clear that advertisement online is by a few participants (MGM1, MGF1 and MGM2) perceived as less annoying than television advertisement.

MGM1: 'On the internet, the advertisements are there and I do see them but I can still continue my tasks. When watching television I feel like my activity gets interrupted by a commercial break, which I find very annoying.'

What is perceived as annoying by some of the participants, however in this study considered as an issue of privacy, are the personalized advertisements that appear on many sites.

F2: 'When I click on a pair of shoes once, just to have a closer at them, they appear in the side bar of every website I visit for the next couple of days. I might not even be interested in buying them but just because you clicked on them once, they keep popping up everywhere. It sometimes even withholds me from clicking on items or products.'

4.5.3. Analysis

Contrary to what is often being stated about them when using the internet but similar to how they perceive themselves when using the internet Dutch mediors have an overall positive attitude towards the usability of websites. Especially the participants in the focus groups did not feel like they missed any skills to fulfil all their online needs, however their number of activities online of some of them is limited to what they know they can do and what they are familiar with (M3, MGF1). Among the survey respondents the female respondents indicated to significantly find it more difficult to keep up with the on-going developments online, but among the participants of the focus groups certain attitudes were not found. Vuori and Holmlund Rytönen (2005) stated that Finish internet users aged 55 and older indicated that they needed more websites that satisfied their personal needs, however no such results were found in this study about Dutch mediors. Dutch mediors in general are confident about their internet skills, indicating a high level of perceived ease of use (Pan & Jordan-Marsh, 2010). In accordance with earlier research, the overall positive perception of the usability of websites is slowly diminishing when survey respondents are older. Not many gender differences were found, except for the correlation between gender and using websites in a foreign language, which women indicated to find significantly more difficult. Also in the focus groups no gender differences appeared when talking about the clarity of the website, the use of photos and text to attract readers, the use of

colouring to offer guidance through a website and becoming a member of a website or platform. Dutch mediors in general are asking for clear, fast and logical websites. The purpose of the website or of specific features of the website need to be clear in order to be clicked on. Stressing their practical and utilitarian approach towards internet use, Dutch mediors seem to ask themselves ‘what’s in it for me?’ before clicking anything. The more hedonic look and feel of websites as the WelkomLife webpage clearly did not attract to the focus group participants and even somewhat scared them and withhold them from browsing the website. Hedonic websites are defined by Scarpi (2011) as websites on which the browsing or the activity executed on the website are the final goal, whereas utilitarian websites are defined as website that serve as an instrument to reach an external goal. Besides having clear opinions about what they as users like and do not like on websites, Dutch mediors do not seem to be naïve when it comes to online advertisement and marketing. Especially when they are asked to subscribe themselves to websites or services in order to receive special deals or extras, they seem to be conscious about the benefits they are getting in trade for the information they are leaving behind (Arora, 2013). Looking at the perceptions and opinions the Dutch mediors shared in this study regarding their ability to use the internet and the usability of the internet in general, I do not agree with the overall perception of middle aged and older people and their use of the internet. Even though the range of tasks in some cases might be limited to what people are familiar with, it can be stated that Dutch mediors in general are confident about their ability to use the internet and are able to satisfy their digital needs. Just as in the study by Pan and Jordan-Marsh (2010) the high levels of PU and PEU are said to positively influence the internet use and internet adoption of Dutch mediors. Further research about the internet practices of Dutch mediors or middle aged internet users in general should focus on their abilities instead of their shortcomings in order to better appeal to this large target group.

5. Conclusion and discussion

This chapter will provide the reader with an answer to the central question of this thesis by comparing the findings of this study to what is already known based on previous studies and existing literature. The central question of this thesis is as follows:

“Do Dutch mediors have inherently different behaviours, needs and perceptions when making use of the internet than digital natives or older internet users in this information and social media age?”

5.1. Answering the sub questions

In order to give some guidance to the study, three sub questions are developed to indicate which variables are being researched and how they are mutually connected.

5.1.1. Sub question 1:

What are the most common activities of Dutch mediors online?

The most outstanding finding of this study, when looking at the characteristics in the online behaviour of Dutch mediors, is their predominantly practical or utilitarian approach towards the use of internet. Both in the survey and during the focus groups it became clear that this generation perceives the internet as a tool to execute the same activities they always did in a different manner, making them different from their younger and older fellow internet users in the way they have adapted the internet technology to their existing lifestyle, instead of adapting parts of their lifestyle to the technologies the internet has to offer.

Utilitarian features of the online behaviour

The internet is by both male and female participants perceived as a tool to execute the same activities as they used to do, using a different channel and having more information quicker at hand, for example to communicate with others, to work or to search for information. The mobile phone and personal computer are currently the two most popular devices to use the internet, followed by the laptop and the tablet. Especially among the female participants of the focus groups it became clear that they are using their mobile phone and tablet for more social and fun activities such as social interaction and playing games and laptops and PC's for the more serious and utilitarian activities such as work and e-banking. Even though the participants view the internet as a tool where all information is available, especially when using Google, the most popular search engine in the research sample, research participants are very much aware of the commercial activities of Google and all the information of them that's being saved online, leaving them with a rather neutral opinion about the safety of the internet and the objectivity of using Google as a search engine. Particularly about searching for health information, the participants had differing views about the importance of the subject and the trustworthiness of the information available. For many other sorts of information such

as product reviews, tips on hotels and travelling and online shopping the internet mainly serves as a sort of background information, to create a more complete view on certain topics without excluding the information and opinions from experts, friends and relatives.

Leisure features of the online behaviour

In many cases, a form of leisure or entertainment online is not perceived as leisure by Dutch mediors. The internet is often used to search for information or entertainment online about activities that take place in the offline world, such as reading reviews about restaurants and accommodations, searching for timetables and tickets for movies and theatre and searching online for new recipes to try in the kitchen. In that way, Dutch mediors perceive the internet as a practical tool that helps them execute their offline activities and hobbies. Even activities that in the offline world are perceived as leisure time or being socially active, such as shopping and communicating with others on SNS are not seen as fun or relaxing when done online. Reasons and motivations to use the internet that are purely leisure or entertainment such as playing games or passing time are the least popular reasons to go online. Remarkable in this study is the perceived difference between internet devices used mainly for utilitarian practices such as laptops and PC's and internet devices that are used for hedonic activities as playing games and watching television online such as tablets and mobile phones. Women and older internet users in this research sample indicate to go online for this reasons slightly more often but now strong significant correlations are found.

5.1.2. Sub question 2:

What is the range of perceptions, digital needs and desires of Dutch mediors when making use of the internet?

Overall it can be said that Dutch mediors have accepted the internet and its technologies in the way it is developed and presented to them and therefore research participants indicate both in the survey as in the focus groups that the internet fits and satisfies their personal needs. In general, Dutch mediors are confident when using the internet and believe that they can execute the activities they want to do and fulfil in their own needs when using the internet. A large majority of the survey respondents does not agree with the statement that there should be more websites online that appeal to their specific needs.

Utilitarian features of online preferences and digital needs

When discussing various features of websites the participants like and do not like it becomes clear that they prefer websites designs that are clear and logical. Browsing through the WelkomLife webpage participants indicate multiple times that the website is too crowded and lacks guidance through the various categories. Survey respondents suggest that the websites they are using in general are clear and logical and that it is easy to understand the overall message of the website. Similar to the survey respondents, focus groups participants prefer to use websites on which the information is organized chronologically, especially news websites, with textual attention grabbers that make it easy for the

reader to decide if the information in the article is of value to them. Photos are perceived as attractive but give little valuable information to the reader and an overkill of photos is by participants often seen as messy. The use of colours to add guidance to the website and lead the readers through the various categories is brought up by both female and male participants in different focus groups and is seen as positive, clear and logical. Both the focus group participants and the survey respondents suggest to often search for practical information online that is used in the offline world, such as product reviews, information on hobbies and recreational activities and tips on hotels and restaurants, indicating that this age group does not search or finds much entertainment or leisure online. Informative websites and texts are preferred over entertaining texts and websites since online entertainment is by many focus groups participants perceived as a waste of time. When talking about the issues of privacy online that emerges with leaving a lot of personal data on the internet, both survey respondents and focus group participants seem to be aware of this, are familiar with deleting cookies and know how search results and personal advertisement online are manipulated by earlier search terms and personal information that is saved about them.

Leisure features of online preferences and digital needs

Participants of the focus groups state that they always go online with a certain goal or purpose in mind and rarely to never browse the internet to pass time. Nevertheless the participants indicate that when using the internet to execute specific tasks or activities, they often get distracted by links or advertisements and subsequently spend more time online than intended. Informative texts and websites are preferred by the focus groups participants, containing information about news, work and other topics that are of interest to the reader. Both female and male participants suggest to rarely browse a website like WelkomLife, containing background information and human interest-articles and having a the look and feel of a magazine or tabloid. Becoming a member of a website in order to receive full access to the content of the website is perceived as a barrier to visit the website. Women indicate that they are trying to avoid the overkill of junk email containing marketing tricks and advertisement in their inbox and men indicate to often not even read the junk email they are receiving. Besides that, participants are aware of the trade-offs in order to receive online services. Looking at their rather neutral opinion regarding the safety of the internet and their personal data, Dutch mediors cannot be seen as naïve internet users. Both sexes in this age group are not a big fan of playing games online and when asking the participants if they are experienced in playing games with strangers online the tone of voice becomes negative. Playing games online, especially with strangers, is out of their comfort zone and is perceived as not fun, unnecessary and a waste of time.

5.1.3. Sub question 3:

To what extent do men and women differ in their online behaviour and how are these differences expressed among Dutch mediors?

No strong significant differences between men and women between the age of 45 and 65 are found. Nevertheless the discussion during the focus groups revealed some gender differences in approaching and using the internet and some correlations between gender and the actual behaviour online are found in the analysis of the quantitative data.

Utilitarian features of gender differences

On average, men indicated to make use of the internet for a higher number of years than did women and they are also taking longer internet sessions than women do. It is therefore expected that the male Dutch mediors are more experienced in using the computer and the internet than the female Dutch mediors. Male respondents also revealed to have a significant more positive perception of the internet in general than the female respondents. In the focus groups, some of the female participants indicated to be afraid sometimes of doing something wrong, especially when using new technologies such as SNS. Besides that, women seemed more comfortable to ask for help from their children or colleagues when experiencing difficulties. These results are in line with earlier research stating that women would be more anxious towards computer and internet use and that these differences would grow when age increased. Nevertheless no significant results for age differences are found during this study. The oldest male participant in the focus groups stated that he never clicked on anything written in English since he does not speak the language and is afraid to do something wrong. In the analysis of the quantitative data no significant difference between age and using websites in foreign languages is found, however a small significant between gender and using websites in a foreign language are found, indicating that women agree more with the statement that it is difficult to use websites in a foreign language. The use of SNS is for both men and women a highly practical tool to communicate and socially interact with others, however the findings show that men are using SNS mainly business wise (e.g. to maintain business relationships and to communicate with brands) whereas women are using SNS mainly to socially interact on a personal level. Facebook is the most popular SNS among both men and women. Male participants are also more active in the information SNS such as LinkedIn and Twitter and female participants more often use the social and visual dominated SNS such as Pinterest and Instagram. Contrary to the offline world, shopping and window shopping are male dominated activities online. By both men and women online shopping is seen as a practical substitution, whereas female participants view the activity of going shopping as an entertaining and leisure activity. Men buy more online and are also active and frequent readers of online reviews and comparison websites.

Leisure features of gender differences

Just as in earlier research it became clear in this study that men have a slightly more practical approach towards the use of the internet than women, even though the differences are minimal. This also influences the leisure time spent on the internet, since male respondents in the focus groups indicated to rarely use the internet for leisure activities or did not perceive leisure activities online as such.

Female participants do state as well that they use the internet for practical reasons mainly but nevertheless elaborated more on leisure activities during the discussion such as searching for fashion products, playing games online, socially interacting through SNS and internet sessions that result in browsing the internet clueless even though it is perceived as a waste of time. Besides that, the female participants had a more positive tone of voice towards the entertaining way of writing and giving information on WelkomLife and are more positive about possible return visits compared to the male participants, indicating that women might be more open to spend leisure time online instead. Since women tend to interact socially and communicate with others more often online, they also seem to worry much more about the digital divide that exists between them and younger internet users. This means that they are not only more computer anxious than their male counterparts but that they are also more aware of the opinion of younger internet users when the middle aged people start using SNS that were originally designed for the youth, such as Facebook. Some female focus groups participants elaborate on how they would never invite their children or friends of their children to become their friend on Facebook, since they don't feel that they have an offline social connections with them. Male participants do not seem to care about this, maybe because they are not using SNS in the same way as women do.

5.2. Answering the central question

In this thesis the central question of the study has been the following:

“Do Dutch mediors have inherently different behaviours, needs and perceptions when making use of the internet than digital natives or older internet users in this information and social media age?”

This study has been initiated to minimize the gap in research that is detected about the characteristics in online behaviour of Dutch internet users between the age of 45 and 65 years old, even though this part of the Dutch population is becoming the largest and wealthiest age cohort in the population. Research about the internet use in general often focused on either young internet users such as teenagers and students or very old internet users, such as retirees and people in nursing homes paying less attention to a group of internet users who are not born as internet natives but nevertheless are expected to use the computer and internet a lot in their daily lives. Overall it can be stated that the internet use of Dutch mediors is not influenced by their own perception of their age or the perception of their age of their social environment. Dutch mediors in general are confident when using the internet, do not indicate many problems related to the usability of websites and have a rather positive perception about the internet in general. Similar to what is stated in earlier research, middle aged people such as the Dutch mediors have a very practical approach towards the use of the internet and mainly use the internet to execute specific tasks or to search for particular information about something. In this study this is found to be even stronger for men compared to women. Contrary to

what is stated in many researches about older adults online and the influence of physical declines on computer and internet use starting around the age of 50, Dutch mediors in general are in good health and over ninety per cent of the survey respondents indicated to not experience any physical decline or conditions that limited their use of the internet. Their overall perception of their age is that they feel younger than they actually are, which is also suggested by focus group participants who indicated to identify more with younger couples than with older couples and who stated to feel offended by Google when receiving advertisements about stair lifts and funeral insurances even though Google knows they are 'only fifty years old'. The perception of age is said to be of influence on the intention to use technology and the acceptance and adoption of new technology. No significant results for this effect are found in this research however some of the focus groups participants elaborated on how they were uncomfortable and unwilling to learn to use SNS because they do not expect it to enrich or enlighten them and because they do not give themselves the time to learn how to use it. Even though the use of the internet and SNS in particular are no longer perceived as something especially for the youth, there still is some debate between focus groups participants about a digital divide. Especially the use of SNS gets influenced by their age, since female participants indicate not to interact with younger Facebook users because they do not want to interfere or mingle into the environment of the youth. Furthermore, online behaviour with a typical hedonic approach such as playing online games, browsing the internet to pass time and social-information seeking are not very popular activities around Dutch mediors who state to use the internet only for practical purpose and who do not perceive the internet as fun and entertaining. According to earlier research this is different from their older and younger counterparts and is specifically related to the generation of middle aged people. Since both the focus groups participants as the survey respondents indicate to feel healthy and younger than their actual age, age does not have a strong influence on their online preferences and digital needs. Nevertheless their typical practical approach towards the internet results in preferences regarding informative content above entertainment and leisure, clear and logical websites on which short textual titles give an overview of what can be expected of the content and a look-and-feel on the website that is not to crowded and that offers guidance towards the newest and most important information. Small significant negative correlations are found between the usability of websites in general and age, indicating that older respondent disagree to a somewhat larger extent that websites in general are clear, logical, easy to understand and to fit their personal needs. Overall Dutch mediors claim that websites in general fit their personal needs and disagree with the statement that more websites should appeal to their specific needs. This is partly explained by the data from the focus groups, indicating that the participants do not have any specific digital needs online because they only use the internet for activities they are familiar with or of which they know that can be executed online. During this study no experimental behaviour has been identified, resulting in little specific digital needs.

In conclusion it can be said that this generation of Dutch mediors online is a very specific group regarding their online behaviour and online preferences and that these factors are partially influenced by their age and their perception of their age. People aged between 45 and 65 years old do no longer perceive themselves as old and are therefore using and trying the same technologies online as their younger counterparts, however they do adapt the use of it to their own lifestyle. On the other hand their practical approach towards the opportunities and possibilities the internet has to offer influences their online behaviour and preferences. Websites designed clear and logical, offering informative and trustworthy content will appeal to this specific group of Dutch internet users.

5.3. Limitations and implications for further research

Even though this research has been executed with greatest care and precision it should be taken into consideration that the explorative nature of this study comes with some limitations. At first, the small research sample and the large amount of data retrieved from a small amount of focus groups participants will not make it possible to generalize the retrieved results over the total Dutch population of internet users between the age of 45 and 65 years old. However, this was never the purpose of this study. Nevertheless some important motivations to use the internet and interesting correlation between online behaviour and preferences and age and gender are identified, creating options and opening for further research.

The way of data collection might have led to a set of research participants that is not representative of the Dutch population between 45 and 65 years old. Survey respondents were mainly gathered using online platforms such as Facebook and WelkomLife, which might have resulted in a female dominated data set. Besides that the snowball method used to retrieve the focus group participants could explain the small variances between the various participants. When doing further research about the perception of age and the online behaviour a larger research sample will assure for more reliable and generalizable results.

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