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Underlying factors that drive or deter older individuals to take part as a provider in the sharing economy

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Preface

When I graduated for my Bachelor in E-Commerce, I felt anxious but excited to start the Master Marketing. This is going to be a long and tough year was what I thought. However, the opposite was true, it was fun, I have never learned so much in a year and at this moment of writing I can't believe one year of school has passed by. I have had a great year at the Erasmus University, I've learned from excellent lecturers, and I would like to thank the Erasmus University for offering that.

Secondly, I want to thank my parents for encouraging me to extend my period of education, because 'there would still be plenty of time left for work'. Furthermore, I would like to thank my supervisor, Sonja Wendel, for all her support and tips through the process of this thesis. She provided me with important advise and meaningful feedback. Additionally, obtaining the number of respondents for my survey would not have been accomplished without the help of my 'survey ambassadors'. I want to thank them all for their kindness and the time spent time in sharing the surveys, either offline or online. Finally, my gratitude goes to my sister who provided me with advice on my finished thesis.

After accomplishing my Bachelor thesis in less than twelve weeks with little hassle or stress compared to other students, I felt very confident for the upcoming thesis. However, during this thesis I have experienced some struggles and during those times, my twin sister helped me to get through. However, I really enjoyed writing my Master thesis and I hope you enjoy reading it too.

"The size of your success is measured by the strength of your desire, the size of your dream, and how you handle disappointment along the way." (Robert Kiyosaki)

- Annoeska Banen Rotterdam, 2019

Abstract

The purpose of this master thesis is to explore the drivers and deterrents of older individuals to share their goods or services on a sharing economy platform. The size of the older population is growing rapidly and they are considered as a burden to society. However, there are various ways in which they can remain productive and add value to society. Participation in the sharing economy as a provider could be one of these productive activities, by sharing their goods/services on sharing economy platforms to other consumers. This study addresses the research gap regarding motivators and barriers specifically for providers and especially for older individuals. Therefore, the following research question is formulated: "What are the underlying factors that motivate or deter older individuals to take part in the sharing economy as a provider?"

In order to obtain an answer on the central question two methods are applied, including a literature study on the extant literature and a quantitative research on 139 Dutch consumers in the age of 45 years and older. The literature review reveals six potential drivers and three potential barriers for participation as a provider in the sharing economy. The quantitative analysis is based on a multiple linear regression analysis that examines the effect of the identified drivers and barriers on attitude towards the sharing economy. The results identify two motivators and one barrier that significantly affect attitude towards the sharing economy. Besides, a positive attitude towards the sharing economy has a positive influence on the intention to provide in the sharing economy.

This thesis confirms existing literature studies and theories that economic benefits are an important driver for participation in the sharing economy. The older individuals in this study are motivated by the money they can earn using SE platforms. Besides, environmental benefits are the strongest driver in predicting and increasing attitude towards SE. The older population appears to be driven by the fact that engaging in the sharing economy reduces the negative impacts on the environment, reduces the use of natural resources, and is a more sustainable way of life.

The outcomes of this research enable platform operators to understand people's motivations and barriers to use sharing economy platforms. Platform operators and marketers are advised to have a major focus on the environmental friendly side of sharing, and the economic benefits it provides. Besides, they should attempt to minimize the barrier of participation by clarifying how sharing generates a sufficient amount of extra income.

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Chapter 1. Introduction

The 'elderly' are nowadays seen as a burden to society. The older population of 60 years or older, is growing in size and becoming the biggest proportion of the world population (United Nations, 2017b). The United Nations forecast that the amount of individuals that are 60 years or older is going to more than double in 2050 and to more than triple by 2100 compared to 2017 (United Nations, 2017b). The tremendous growth of the older population makes it a controversial topic, including a political matter. Unfortunately, the focus of the aging population is predominantly on the challenges and disadvantages of it. The older population is seen as a 'burden' to society and associated with burdening the resources of the younger population, taxing the health care system and bankrupting the national budget (Morrow-Howell & Wang, 2012; International Monetary Fund, 2017). In general, it is correct that the aging population comes with various challenges and disadvantages. Several studies investigated the effect of the growing older population on economic growth and indicate that it would reduce the economic growth (Hyun-Hoon et al. 2015; Bloom et al. 2011; Powell, 2010; Maestas et al. 2016). More explicitly, Maestas et al. (2016) estimated, based on historical data, that a 10% rise of the proportion of persons of 60 years or above is associated with an 8.3% decrease in economic growth and a decrease of 3.9% in growth per capita GDP. The decline in economic growth is mainly due to the fact that the workforce participation is decreasing, becoming older and is associated with reduced productivity growth (Bloom et al. 2011; Maestas et al. 2016; Powell, 2010; International Monetary Fund, 2017). Based on this, it can be stated that the aging population faces and triggers challenges and is in a way a burden to society. However, it should not be forgotten that the elderly can also bring value to society in different ways. This line of thought is clearly expressed in a headline of the Conversation¹: 'It's time to treat aging as an asset, not a burden' (Raina, 2017).

The size of the elderly is not only growing, they're also becoming substantially healthier (Bloom et al., 2011). Most of the older adults of 60 years or above are still vital, and Morrow-Howell and Wang (2012) foresee that they will be living a longer and healthier life and acquire higher education levels. This suggests that they can be of added value to society, for example by working or grandparenting. The phenomenon where older adults engage and contribute to the community is called 'productive aging' or 'active aging' (Morrow-Howell & Wang, 2012). Productive aging refers to the idea that older adults can be more efficiently engaged in society and can offer social or economic input to the community by for example volunteering, working, and caregiving (Morrow-Howell & Wang, 2012).

¹ The Conversation is an English independent source of news and views, sourced from the academic and research community and delivered directly to the public

Participation in the sharing economy could be one of these productive aging activities. Although participation in the sharing economy (hereafter: SE) does not belong to one of the productive aging activities, it could fall into the category of work. The definition of the SE is captured in a study by PriceWaterhouseCoopers (PwC) (2015a) as a medium where: "Users share their unused capacities or untapped resources (e.g., tangible assets, services, money) on an on-demand basis, i.e., immediately when the need arises. They usually do this through an IT platform, on the basis of mutual trust, with special consideration given to personal interaction and communal experience, while striving for sustainability." The SE is increasing in size, especially in the past years and is expected to increase in market size from 15 billion in 2015 towards 335 billion in 2025 (PwC, 2015b). The SE has been a hot topic especially the past few years, which is also reflected in the number of publications². From 2013 onwards there has been an explosion of publications regarding the SE. Although the SE has been practiced for over a long time, the exchange between participators of the SE became recently easier through internet platforms that connect sellers with buyers. Furthermore, the rapid growth of the SE is due to the fact that it offers advantageous opportunities to consumers, the environment and the economy as a whole (PwC, 2015a). Consumers can save money by using platforms or gain money by sharing their goods/services on SE platforms. For example, staying at an Airbnb saves money of a more expensive hotel for the buyer, and the seller gains money by sharing their room on the SE platform Airbnb.

Consumers can participate as a user or provider in the SE, or both. Users are consumers that use the particular service, and providers are the consumers who share their products/services on SE platforms. Linking the SE and the elderly, an interesting study of PwC (2015a) states that, from all providers³, only 16% of them are 65 years and older. The major providers are those between 25 and 34 years and between 35 and 44 years, each represented with 24% (PwC, 2015a). ING also acknowledges the lack of elderly in the SE (ING, 2015a, 2015b). In a Dutch study of ING (2015a) they identified that only 3% of the people of 55 years or older are providing in the SE. Additionally, ING (2015a) argues that the elderly are less interested in sharing their car or house in exchange for money, even though particularly the elderly often have underused cars, own relatively big houses or have underused space at home (ING, 2015a). As a result, they are missing out additional earnings. However, besides the statement of ING, it is unclear by which reasons older individuals are restrained from providing and what would motivate them to do so.

² Types of publications includes scholarly journals, dissertations & theses, books, magazines, newspapers etcetera retrieved from <u>https://proquest.com</u>

³, A 'provider' in the SE is an individual who offers a service or commodity to consumers

1.1 Problem definition

1.1.1 Problem statement and Research question

The SE can offer great benefits to consumers and the older population are the appropriate individuals to be providers of the SE. In addition, the size of the older population is growing rapidly, with an accompanying workforce decrease, which results in a decline of economic growth. However, older individuals can add value to society by engaging in productive aging activities. These activities include caregiving, volunteering and paid or unpaid work, but could also include participation in the SE by sharing their goods/services on SE platforms. The older individuals are lagging behind in their participation as a provider on SE platforms. There is a lack of research regarding the drivers and deterrents of individuals to share goods/services on SE platforms. In addition, the older individuals are often in the minority in the conducted research. Thus, since the older people are not yet main providers in the SE and it is unknown which factors play an essential role in this regard, the question that needs to be answered is which underlying factors motivates or hinders the elderly to take part in the SE as a provider. This problem and information shortage will be resolved by answering the central question, which is formulated as: "What are the underlying factors that motivate or deter older individuals to take part in the sharing economy as a provider?"

1.1.2 Sub questions

The following sub questions will help to answer the research question and to tackle the problem:

- 1. What is the sharing economy?
- 2. What are the benefits of productive aging?
- 3. What are drivers of productive aging?
- 4. Which factors play a sufficient role for individuals to participate in the SE?

This thesis first provides an overview of key concepts essential for this research; namely: the SE and the elderly. The definition of the SE will be provided, as well as example and characteristics of the main users of the SE. Besides, the SE in the Netherlands will be described, with examples and conducted studies. Henceforth, productive aging will be explained and their benefits to the elderly. The next section discusses potential drivers and barriers for participation in the SE. It starts by describing drivers of productive aging activities. After this, several potential drivers and barriers will be described by using prior literature studies. The last sub-question will be answered using literature studies. The ways to support active engagement and the factors which play a sufficient role in attitude towards SE and intention to participate in the SE generates hypotheses. These hypotheses will be tested and are confirmed or rejected based on the outcomes of the quantitative research.

1.1.3 Delimitations of the study

This thesis has a particular focus on the underlying factors of older individuals of 45 years and older. Therefore, consumers below this age were not included in the survey. In addition, the survey is solely focused on Dutch consumers.

1.2 Contribution

1.2.1 Theoretical contribution

With this thesis the researcher aims to contribute to the existing literature. Böcker and Meelen (2017) argue that quantitative research into the drivers of SE is still largely lacking. Therefore, quantitative research is conducted to examine the drivers and barriers. Besides, this thesis contributes to the current literature in that it explains which factors are essential for older individuals to participate as a provider in the SE. Literature studies that have been conducted focus mainly on factors that motivate individuals to participate in the SE. Factors that restrain individuals from participation in the SE are often omitted in these studies. Likewise, van de Glind (2013) suggests for future research to examine barriers of the SE. Finally, conducted quantitative studies regarding drivers or barriers of participation are mainly investigating the Millennials. However, it is likely that different sets of drivers motivate different consumer segments to participate in the SE. Correspondingly, Hellwig et al. (2015) indicate that different socio-demographic groups participate in SE platforms for various reasons. In addition, Böcker and Meelen (2017) indicate that older individuals are significantly more driven by social reasons compared to all other age groups. This study will contribute to the lacking knowledge about the motivations and deterrents of older individuals to participate as a provider in SE. Lastly, the majority of the literature does not differentiate between providers and users. Tussyadiah (2016b) and Sung, Kim and Lee (2018) acknowledge the lack of information regarding the role of provider. However, it is likely that their motivations could differ substantially from users of the SE. Thus, this study makes a relevant contribution to the current knowledge within the field of study.

1.2.2 Managerial contributions

SE platforms can benefit from this research in that it clarifies which factors are crucial for the elderly to participate as a provider in the SE. It is beneficial for SE platforms to be aware of the underlying factors so that eventually more elderly will participate in the SE. The capability of understanding the users' motives for engagement in SE services is a crucial success factor for SE platforms. Without an understanding of the key drivers and impediments, SE platform suppliers will not be able to develop the right platforms which attract the right participants (Hawlitschek et al., 2018). Likewise, while

several platforms have been very successful and experienced tremendous growth, among Airbnb and Uber, many other platforms fail to achieve this success (Choudary, 2013; Van Alstyne et al., 2016). The practice of the SE is only possible when it meets a massive amount of people. Martin Voorzanger, an initiator of the ride-sharing platform Toogethr, explains that users are the content of the platform, and without users, the platform has no content. Which implies that when no one provides a ride on the car sharing platform Toogethr, nobody can find a ride (M. Voorzanger, personal communication, December 2012). To reach that critical mass, it is vital to have an understanding of the drivers and deterrents for using the SE platform. Thus, understanding what attracts and hinders consumers is critical for SE platform suppliers to provide customers with a suitable platform (Hawlitschek et al., 2018). By means of this research, SE platforms will have the knowledge on how to motivate older individuals to be a provider on their platform. Besides the drivers, this research also identifies which factors restrain older individuals from participation. This can give platforms useful insights on how to attract older individuals by minimizing the barriers. Furthermore, the SE platforms could adjust their platforms, based on the outcomes of this study.

1.3 Structure of the research

After this introduction of the thesis, the following chapter starts with background information and the fundamental concepts of this thesis. In the following chapter, ways to support productive aging activities among the elderly will be explained. Additionally, factors that are relevant in motivating or restraining individuals in the SE will be described. These factors linked to the characteristics of the elderly market will generate hypotheses. The third chapter presents the research methodology. In the fourth chapter, the outcomes of the research will be provided. Finally, conclusions based on the data will be drawn in the discussion part. Chapter five also includes the theoretical and practical contributions, the research limitations and directions for further research.

Chapter 2. Literature review

This chapter provides a definition of the sharing economy and describes characteristics of typical SE users. Additionally, several studies which investigated the SE in the Netherlands are discussed. Hereafter, potential drivers and barriers of participation in SE are described based on literature studies. Lastly, the conceptual model is presented with an overview of the developed hypotheses.

2.1 The sharing economy

2.1.1 Definition

Finding one clear explanation of the SE is difficult. Several studies proposed and worked with different interpretations, and there has been no consensus yet for a commonly accepted definition (Buda and Lehota, 2017). However, it is vital to have a delineated description of the SE, which will ensure a common understanding among the respondents in the survey that is executed. Besides the divergent definition, the SE is used by many synonyms, such as collaborative consumption, gigeconomy, peer-to-peer economy, shareconomy, access-based consumption and commercial sharing systems (Buda and Lehota, 2017). Frenken and Schor (2017) provide an overview of currently used definitions and based on these terms they conceived the following interpretation of the SE: "Consumers granting each other temporary access to under-utilized physical assets ('idle capacity'), possibly for money" (p. 2-3). Hawlitschek et al. (2018) describes the following characterizations of the sharing-economy: non-corporate, commercial, temporal and tangible. This interpretation implies that transactions go through private individuals and are commercial, as there is an exchange of money involved between individuals. The exchange is usually temporal or short-term and mainly focused on physical products or services. However, for several characterizations are exceptions (Hawlitschek et al., 2018). The transaction is for example not always commercial and could also be executed without a money transaction. Additionally, transactions are not always tangible like platforms that offer services like on TaskRabbit⁴.

PwC applies a different definition and captures the SE as: "Sharing economies allow individuals and groups to make money from underused assets. In this way, physical assets are shared as services. For example, a car owner may allow someone to rent out her vehicle while she is not using it, or a condo owner may rent out his condo while he's on vacation" (PwC, 2015a, p.5). However, knowledge and information are also shared through the SE platforms, for instance, on Skillshare⁵. All

⁴ Taskrabbit is an online marketplace that connects consumers in the neighborhood to find or to offer help with everyday tasks like moving, delivery and cleaning

⁵ Skillshare is a learning platform with online classes taught by consumers

these different definitions and exceptions complicates it to develop one clear definition that is used by everyone. Yet, based on a combination of the above discussed literature and definitions, the following description of the SE is developed by the researcher and used in this thesis: *"Consumers share, give or exchange their under-utilized capacities or resources (e.g., products, services, knowledge), usually facilitated by an online platform, and benefit from the exchange either with money, a non-monetary compensation (like swapping, bartering or trading) or a personal gain (e.g., <i>self-fulfillment*). Uber is a well-known SE platform by many consumers. However, some argue that Uber is not an example of the SE (Rushe, 2019; Bellafanta, 2018). According to the developed definition for this thesis, Uber would be an example of the SE because Uber drivers are using their own cars, which is the under-utilized asset. However, Uber drivers need to follow an education before they can offer their service to consumers. Therefore, Uber seems more like a taxi company with a different monetization model compared to traditional taxi companies.

2.1.2 Users of the sharing economy and their characteristics

Individuals using SE platforms are, according to a study of Buda and Lehota (2017), in general, internet users who frequently use applications, regularly use their bank cards for purchases, and are open to novelties. Additionally, they are cost-sensitive, extroverted, flexible, and environmentally conscious people. Among the respondents in the study of Buda and Lehota (2017), there were 150 out of 452 respondents that used SE services. This group had an average age of 37 years, with 95 women and 55 men, and a considerably overrepresented university graduates.

Several authors argue that the SE is especially appealing to young users and Millennials (Hawlitschek et al., 2018; European Commission, 2017; Godelnik, 2017; PwC, 2015c; Ranzini et al., 2017; Hwang & Griffiths, 2014; Möhlmann, 2015). The Millennials are identified as a key consumer group for the SE (Head, 2013; Rebell, 2015). One reason for this is the fact that Millennials are characterized by aspects that go along with characteristics of the SE (Hwang, & Griffiths, 2017). Moreover, they are used to complete access to online and information markets, they embrace change and demand online/mobile solutions (Head, 2013), they are open-minded and willing to try alternative means of ownership, as they have less interest in material goods (Rifkin, 2014). Rifkin (2014) described Millennials as individuals that have: "[. . .] more concern for others and less interest in material goods [. . .] are less interested in keeping up with materialistic trends and less invested in obsessive consumerism as a way of life. A sharing economy of collaborative prosumers is, by its very nature, a more empathetic and less materialistic one" (Rifkin, 2014, p. 224). Although research argue that the SE is particularly attractive to high educated Millennials (Campbel-Mithun, 2012; Ipsos Public Affairs,

2013; Hwang & Griffiths, 2014; Möhlmann, 2015), some believe that the SE will stretch far beyond these Millennials. Markus Barnikel, CEO of Carpooling.com, explains the idea behind this in a video of an event dedicated to the collaborative economy (Ouishare TV, 2013). Markus explains that when he joined the company Yahoo in 1999, at a time the Internet came up, people around him said that the Internet would be a rage and only for the urban elite, which not appeared to be the case. Markus continues by arguing that these days people say the same thing about the SE and he believes the same will happen with the SE, and thus will stretch far beyond the Millennials (Ouishare TV, 2013). This is in line with Botsman and Rogers (2011) who explain that it is logic that people under 35 years are currently dominant in SE, as they are more likely to be digitally savvy, which is necessary for using SE. Gansky (2010) argues that the changed attitude of consumers towards consumption serves as the reason driving the SE. Consumers are more aware of environmental pressure and are in turn encouraged to search for new ways of using products more thoroughly (Gansky, 2010). Furthermore, consumers consider the SE with reducing the negative impacts on the environment (Botsman and Rogers, 2010; Walsh, 2011). Additionally, Tussyadiah (2015, 2016b) concludes in her studies that reducing the negative effects on the environment is one of the main drivers to use SE platforms in the travel industry. The sharing travel industry includes for example Airbnb where consumers lend out their home or a part of their home for travelers. Additionally, according to Botsman & Rogers (2010), are consumers more open to new approaches to fulfill their needs, for instance by engaging in SE platforms.

In general, there are some common characteristics shared by current users and providers of the SE. Common characteristics of SE platform users are individuals with a high income and high education (Olson, 2013; Tussyadiah, 2015). An unexpected finding is that higher income individuals are more likely to participate in SE platforms (Olson, 2013), while economic benefits are one of the main drivers of collaborative consumption (Tussyadiah, 2015). Tussyadiah (2015) declares this by the fact that higher educated consumers might have a better awareness of the value of the SE. These findings are replicated in a study of ING (2015a), in which it was shown that particularly Dutch people with a high education and high income are likely to participate in the SE. Additionally, ING (2015a) found that individuals of 35 years or younger are the dominant group in the SE with 10%, and only 5% of the people of 55 years or older are involved in the SE. In the following section the SE particularly in the Netherlands is discussed including examples of SE practices in Holland.

2.1.3 Sharing economy in the Netherlands

Collaborative economy analyst Martijn Arets identified all existing SE platforms in the Netherlands and categorized them into the following categories: services, energy, transportation, space, care, knowledge, goods, logistics, food, and ecosystems (Deeleconomie in Nederland, n.d.). Martijn Arets identified more than 150 different active SE platforms in the Netherlands. Appendix A presents the infographic with the SE platforms in the Netherlands. Major and well-known platforms are Uber (transportation category), Airbnb (space category) and Peerby (goods category) (Deeleconomie in Nederland, n.d.). Examples of sharing goods and services are clothes, gardens, meals, cars, rides, accommodation, skills and knowledge. In fact, everything people can share is a potential SE practice. Uber is a well-known example in the sharing transportation industry, as categorized by the categorization of Martijn Arets. BlaBlaCar is another example in the transportation sharing industry, and matches drivers of cars with individuals who have the same destination as the driver. The platform SnappCar lets people lend out their own car to people in their neighborhood who don't own a car. Airbnb is a familiar example in the space category. Couchsurfing is another example, where members can stay overnight in return for money or for free, or offer their room for travelers. ShareDND, an example in the meal sharing industry, is a SE platform where people can book a dinner at someone's home. Besides these examples, there are many other SE platforms. In the following part the executed researches in the Netherlands concerning the SE are described.

2.1.4 Research in the Netherlands

Only a few researches have been executed in the Netherlands concerning the statistics (e.g., size and growth) and drivers of participation of the SE. A study of ING (2015a) showed that half a million households are either using or providing in the SE. According to ING (2015a) was the estimated size of the market 40 to 60 million euros in 2015, and in expectation of enormous growth. One-third of the respondents in the study declared their intention to participate in the near future. Participating households were projected to grow with 70% towards almost one million households. Equal to other studies, the study of ING (2015a, 2015b) illustrate that younger people are more represented in the SE compared to older individuals, as well as high educated people with a higher income. Besides, the awareness of the SE concept among the Dutch consumers is high compared to other nationalities (ING, 2015b). However, actual providers in the SE are lagging with respect to other European countries. More explicitly, the Dutch share fewer cars, clothes, and tools, and only in the accommodation sharing sector does the Netherlands equate to other countries (ING, 2015b).

Besides the study of ING, research institute NCDO⁶ executed a survey in December 2013, and distinguished between younger (younger than 35 years) and older (35 years and older) Dutch

⁶ NCDO is the knowledge and advice center for citizenship and international cooperation. NCDO conducts research, provides training and stimulates the formation of opinions on global themes by providing publications and stimulating discussions

people. In this study, it was shown again that individuals with a higher income are more likely to share. Additionally, people who adhere strongly to altruistic values share more often (NCDO, 2013). Böcker and Meelen (2017) and Pieter van de Glind (2013) studied the motives of Dutch people to participate in SE practices, which is further discussed in section 2.2. An understanding of the SE, like the definition and the typical user, is essential to comprehend the next part. In the following section, the motivators and deterrents for participation are discussed based on prior literature studies.

2.2 Drivers and deterrents for participation in the sharing economy

Introduction

Understanding consumers' motives for engagement in SE services is a crucial success factor for SE platforms. Without an understanding of the key drivers and impediments, SE platform suppliers will not be able to develop the right platforms which attract the right participants (Hawlitschek et al., 2018). Several studies examined drivers and deterrents for consumers to use SE platforms, but research regarding drivers and deterrents specifically for providers is deficient. Tussyadiah (2016b) refers to the fact that the majority of the literature does not differentiate between providers and users, like hosts and guests in Airbnb. Additionally, Sung, Kim and Lee (2018) acknowledge the lack of information in the role of provider and states: "Understanding why a host participates in the sharing economy provides the basis for preparing a promotion to recruit more hosts. So far, there is a lack of papers analyzing the reasons for engaging in the SE from a provider point of view. It is important to attract new and diverse hosts to continue to develop the platform business" (p. 4). This thesis is focused on drivers and deterrents explicitly for providers to participate in the SE. Though the majority of the existing literature does not differentiate between these two concepts, these literature studies are used in this thesis as a theoretical foundation. One of the researches where explicitly providers of the SE were interviewed, Bellotti et al. (2015) identify that providers emphasize on idealistic drivers like increasing sustainability and establishing a better community. On the contrary, users' motivations are increasing value and convenience (Bellotti et al., 2015). This difference implies that there are possible deviations between the drivers of users and providers to participate in the SE. Thus, only reasonable drivers or deterrents of existing literature for providers will be discussed. For example, a perceived lack of quality of using SE platforms is explicitly a deterrent for users of SE and not for providers. Besides the variables that motivate or restrain individuals to participate in the SE, it is also important to understand what motivates older individuals in general. The existing literature of motivators of the SE is not focused on older individuals. The next section describes motivators of older individuals to stay active and participate in activities, which will form the first hypothesis.

2.2.1 Productive aging

The conventional view of aging is that individuals become unproductive when stepping into retirement, and thus are no longer contributing to society (Dosman et al., 2006). However, various studies indicate that individuals, when moved out of the labor force, stay engaged in productive activities (Dosman et al., 2006). Herzog et al. (1995) describes productive activity as activities that "produce a valued good or service even if the product is not actually paid for" (p.324). Morrow-Howell and Wang (2013) prefer and use a narrow definition and define it as "activities that produce goods and services, whether paid for or not, including working, formal and informal volunteering, and caregiving" (p. 160). In order to continue feelings of productivity and usefulness, retired people seek new activities as a substitute for their paid employment (Kelly, 1997). This should be seen as a positive contribution to society, as it, according to Caro et al. (1993), minimizes their dependency on the health and social services systems. Hicks (2002) states that: "We created by accident a huge currently little-used pool of human resources—skilled, healthy retired people, many with too much time on their hands" (p. 47). Participation in the SE could fill up this time in a positive and contributing way.

Advantages and disadvantages of productive aging

Productive aging activities consist of caregiving, volunteering, and working (Dosman et al., 2006). SE practices are not mentioned in these definitions but could include work, whether paid or unpaid work. Evidence proves that working and volunteering are beneficial for older individuals (Morrow-Howell and Wang, 2013). Older individuals who volunteer have been identified with improved cognitive, physical, and mental health (Carlson et al., 2009; Fried et al., 2005; Hong and Morrow-Howell, 2010). Soumerai and Avorn (1983) discovered a significant difference in perceived health between older workers and retirees. In addition, the study of Mor-Barak et al. (1992) identified a significant positive relationship between employment, social networks, and better-perceived health. Furthermore a sample among 1.513 older men, Bossé et al. (1987), found that retired men more negative physiological symptoms reported, compared to older workers.

However, also adverse effects have been associated with productive aging activities, as caregiving can impact a person's mental and physical health negatively and reduce their financial stability (Morrow-Howell and Wang, 2013). The conditions of participation in productive activities moderate

these positive and negative effects (Morrow-Howell and Wang, 2013). Morrow-Howell and Wang (2013) suggest that older people should be given plenty of different activities to engage in, that match their capabilities and preferences. They state that: "The development of opportunities, not obligations, is key. To increase inclusion, outreach and facilitation efforts should ensure that all older adults – at all income, educational, and ethnic backgrounds – are given opportunities" (Morrow-Howell and Wang, 2013, p.168). This is precisely what SE activities allow for, as there are multiple forms of activities where people can choose from that could match their abilities.

Besides the negative effects of productive engagement, there is also evidence that older individuals have to deal with many barriers in the world of work (Mor-Barak, 1995). Results of a study of Rife and Firse (1989) show that age discrimination becomes a painful reality for many older individuals. Furthermore, it is indicated that older adults are discouraged by the job-seeking process itself and are being rejected by employers (Mor-Barak, 1995). Thus, despite the many benefits of employment for older adults, there are many barriers out there that discourage them from staying productive. In contrast to conventional jobs, the SE does not have these disadvantages, as age discrimination can't play a major role in SE participation, and everyone can share their goods and services on these platforms.

Drivers of productive aging

There is a lack of knowledge regarding the drivers for older individuals to engage in productive activities, and the empirical literature shows that these factors differ and are very complex (Bengtson and Schaie, 1999). Shen (2017) investigated more than 10.000 Americans who engaged in either one of the three productive activities. Good health is identified to predict older individuals' engagement in all three productive activities; employment, volunteering and caregiving (Shen, 2017). Mor-Barak (1995) investigated the meaning of work for older adults seeking employment in a sample of 146 adults of fifty years or older. The results detect four factors to the meaning of work: financial, personal, social, and the generativity factor (Mor-Barak, 1995). The factors financial (e.g., enough money to live on) and social (e.g., interacting with other people) relate to variables that will be discussed more extensively in section 2.2.2. The personal factor includes self-esteem and personal satisfaction. The generativity factor indicates that older adults appear to enjoy teaching and sharing knowledge and skills with the younger generation. The generativity factor is especially crucial for older adults and suggests that jobs that allow being in contact with younger generations, and enable knowledge and experience transfer, may be of particular value to older adults (Mor-Barak, 1995). Based on the literature of productive aging the following factor will be tested.

Generativity

Generativity is identified as a crucial factor in the meaning of work for older individuals, as identified by Mor-Barak in 1995. Generativity refers to the idea that older adults teach and share knowledge and skills with the younger generation. Mor-Barak (1995) indicates that older adults seem to be enjoying this activity. The SE allows doing so, which implies that this variable could be a driver for older individuals to engage in SE platforms. Additionally, according to the Socio-Emotional Selectivity Theory of Carstensen (1995) give older people higher priority to meaningful social interactions like generativity, compared to younger people. Generativity has been shown to lead to more favorable attitudes (Lacroix and Jolibert, 2015). Lacroix and Jolibert (2015) identified that highly generative consumers have more favorable attitudes towards ads and products. Besides, Wells et al. (2016) indicated that generativity plays an important role in predicting attitudes towards the environment. In this study it is therefore expected that a high generativity leads to a more positive attitude towards SE and as a result influences intention to participate in SE. Therefore it is hypothesized that: *H9: Generativity has a positive influence on attitude towards SE*

2.2.2 Research background

There is a number of existing literature and models reviewing the drivers of participation in the SE. Theoretical models, among the game theory's 'prisoner's dilemma' (Rapoport and Chammah, 1970), and 'The Logic of Collective Action (Olson, 1965), explain how consumers' decisions are based on rational reasoning, to either save costs, minimize (transactions) costs, or maximize utility. These theoretical models demonstrate that it would only be logical for consumers to collaborate, as they would be better off by either saving costs or gaining money. This line of thinking was replicated by a research of Möhlmann (2015) who found that respondents who used SE platforms were primarily driven by rational reasons which served their self-benefit such as saving money. However, up until now, are many individuals acting against this reasoning, as they aren't involved or planning to engage in the SE (Möhlmann, 2015). Thus, not only rational thinking or economic benefits are driving or deterring participation, and many other motives could be the reason for engaging or avoiding participation in the SE. Engaging in the SE is entirely in the consumers' self-interest, while at the same moment, it offers considerable economic, social, and environmental benefits (Botsman and Rogers, 2011). Botsman and Rogers (2011) identified that these three benefits correspond with the drivers of SE. Accordingly, these three factors are used as a basic foundation in other researches considering drivers of participation, such as in the study of Böcker and Meelen (2017) and van de Glind (2013). Böcker and Meelen (2017) refer to these three variables as the people (social), planet (environmental) and profit (economic) factors. This section starts with describing the existing

literature of motivational reasons for participation, followed by the variables that hinder individuals from participating. The literature that is primary used is shown in Appendix B, including the methods used by the study and the conclusions drawn from the research.

Motivation

The concept of motivation is used as a starting point for the drivers of participation in SE. Motivation refers to reasons which underlie the behavior of people (Guay et al., 2010), and is thus suitable for this thesis. Intrinsic motivation originates from one's pleasure, interest, or enjoyment (Deci et al., 1999; Eccles and Wigfield, 2002). Extrinsic motivation occurs by the provision of tangible or intangible rewards, such as money, grades, privileges or praise (Deci et al., 1999; Deci and Ryan, 1985; Eccles and Wigfield, 2002; Guay et al., 2010). Research which specifically investigated the role of intrinsic and extrinsic motives on attitude towards SE and the behavioral intention is executed by Hamari et al. (2015). The results indicated that intrinsic motivations are a dominant determinant of attitude towards SE, while extrinsic motives did not have a significant effect. Behavioral intentions for using SE are significantly predicted by extrinsic motivations, as well as enjoyment from the activity. Furthermore, the study of Kooij et al. (2010) indicate a significant positive relationship between age and intrinsic motives, suggesting that older people are more motivated by intrinsic factors for participation in SE. The following hypotheses will be tested:

H11: Intrinsic motivations have a positive influence on attitude towards SE

H12: Extrinsic motivations and enjoyment have a positive influence on intention to participate in SE

Attitude and behavioral intention

Attitude has often been identified as a predictor of intention (Azjen, 1991). The study of Hawlitschek et al. (2018) identified a significant positive relationship between attitude towards SE and the consumer's intention to use SE platforms. Hwang and Griffiths (2017) also discovered, specifically for Millennials, that attitude positively influences behavioral intention. Hamari et al. (2015) investigated the role of extrinsic and intrinsic motivations on attitude towards SE and behavioral intentions and discovered a significant positive relationship between attitude and user intentions. Thus, in comparison to other models, it is expected that there is a positive relation between the providers' attitude towards SE and actual intention to participate. Therefore it is hypothesized that: *H10: Attitude has a positive influence on the intention to participate in SE*.

2.2.3 Motivators

Economic

Economic benefit as a driver refers specifically to extrinsic motivation (Deci et al. 1999; Deci and Ryan, 1985; Eccles and Wigfield, 2002; Guay et al., 2010). Extrinsic motivation occurs by the provision of tangible or intangible rewards like money (Deci et al. 1999; Deci and Ryan, 1985; Eccles and Wigfield, 2002; Guay et al., 2010). Economic benefits are an important driver of participation in SE as identified by several literature studies. Buda and Lehota (2017) executed eighteen in-depth interviews, two focus groups and an online survey and indicate that economic benefits positively affect participation. The study used the conclusion drawn from the research of Hamari et al. (2015), who identified three significant motivators of participation: sustainability, enjoyment of the activity, and economic benefits. Besides affecting intention of participation in SE, Sung, Kim and Lee (2018) found that economic benefits affect the attitude towards the SE platform positively. Subsequently, a positive attitude affects the intention to participate in the SE positively (Sung, Kim and Lee, 2018). Sung, Kim and Lee (2018) studied specifically providers of the SE and found financial gains to be a key driver for providers to share on SE platforms (Sung, Kim and Lee, 2018). In a Dutch survey, van de Glind (2013) found a significant relationship between financial motives on the willingness to take part in SE. Additionally, the study of van de Glind (2013) identified that half of the respondents, providers of the SE platform Airbnb, started participating because of the economic benefits. Additionally, the study of Hawlitschek et al. (2018) found a positive relationship of the motive financial benefits on attitude towards SE platforms. A study on the accommodation sharing industry showed that economic benefits affect future intention to use an accommodation sharing option (Tussyadiah, 2016a; 2016b), and in another study Tussyadiah (2015) indicated that economic benefits are the most powerful motivator for participation in SE.

Thus, where consumers of SE are triggered by saving money with SE platforms, providers could be driven by gaining money through participation on SE platforms, which is the concept of the economic benefits factor. Various studies indicated that economic benefits are a strong motivator for participation in SE (Buda and Lehota, 2017; Hamari et al., 2015; van de Glind, 2013; Tussyadiah, 2015, 2016a, 2016b) and attitude towards SE (Sung, Kim and Lee, 2018; Hawlitschek et al., 2018). In this study it is expected that the economic benefit influence attitude towards SE and accordingly attitude affects behavioral intention.

H1: Economic benefits have a positive influence on attitude towards SE

Social

Social motivation is the 'people' factor of people, planet and profit as indicated by Böcker and Meelen (2017) and many studies indicated the variable 'social' as one of the drivers of participation in SE (Botsman and Rogers, 2011; van de Glind, 2013; Böcker and Meelen, 2017). Sung, Kim and Lee (2018) investigated motivations of both users and providers of SE platforms and found that social relationships affect attitude towards the SE platform positively. Hawlitschek et al. (2018) identified the same result and showed that the social experience that is created by using SE services, enables positive social interactions, and influence attitude towards SE positively. Tussyadiah (2016a, 2016b) found a positive relationship between social benefits and future intention to use an accommodation sharing option. Besides, in a prior study of Tussyadiah (2015) the research identified that interacting and connecting with others was one of the main drivers of participation. In a Dutch study of van de Glind (2013) during twenty in-depth interviews it was shown that social benefits motivate participation in SE. Interviewees stated that helping someone else satisfy but being helped also does (van de Glind, 2013). Additionally, the online survey among 1330 Dutch citizens, showed a positive significant relationship of social benefits on the willingness to take part in SE (van de Glind, 2013).

Regarding age, are older people assumed to be more motivated by social reasons. Cornwell, Laumann and Schumm (2008) suggest that older people are more in contact with the neighborhood. Considering that many SE activities happen in the neighborhood (e.g., Peerby), it is assumed that older people engage in the SE for this motivation. This assumption was confirmed by the study of Böcker and Meelen (2017) who studied differences in drivers between various socio-demographic groups. The data showed that the older population of 65 years or older are less motivated by economic reasons and significantly more by social motives compared to all other age categories (Böcker and Meelen, 2017). Besides age, providers also seem to be more motivated by social reasons in comparison to users (Böcker and Meelen, 2017). Böcker and Meelen (2017) investigated differences in motivations in the role of provider and user of the SE and identified that users are more likely to be motivated by economic reasons, whereas social reasons more strongly motivate providers. Besides, the before named Socio-Emotional Selectivity Theory states that older people give higher priority to emotionally meaningful interactions and goals, like emotional intimacy, generativity and social embeddedness, compared to younger people (Carstensen, 1995).

Social benefits have been identified as a strong driver for people to engage in SE (Sung, Kim and Lee, 2018; Hawlitschek et al., 2018; Tussyadiah, 2016a, 2016b; ING, 2015a; van de Glind, 2013; Böcker and Meelen, 2017). Providers of SE seem to be even more driven by social reasons compared to

users as identified by Bellotti et al. (2015), Böcker and Meelen (2017), and Sung, Kim and Lee (2018). Böcker and Meelen (2017) also discovered that especially older individuals (65 years and older) are more driven by social reasons, compared to other age groups. Therefore it is hypothesized that: *H2: Social benefits have a positive influence on attitude towards SE*

Environmental

Environmental or sustainability motivation corresponds to the planet variable as identified by Böcker and Meelen (2017). Buda and Lehota (2017) executed eighteen in-depth interviews and did not find sustainability as a driver of participation. However, the online survey identified a significant relationship of sustainability affecting participation in SE (Buda and Lehota, 2017). Tussyadiah (2015) studied drivers and deterrents in the accommodation sharing industry and found that reducing the negative impacts was one of the significant drivers for participation in SE. Sung, Kim and Lee (2018) and Bellotti et al. (2015), one of the few studies that investigated drivers of participation particularly for providers, identified that providers emphasize more on idealistic drivers like increasing sustainability, as opposed to the users who want to increase value and convenience by using SE platforms. In the study of Sung, Kim and Lee (2018) sustainability was identified to affect attitude towards the SE platform positively. The study of ING (2015a) showed that Dutch providers are more idealistic in comparison to users, and a sustainability motive primarily drives providers; to reduce waste. On the other hand, users' primary motivation is to save money (ING, 2015a). Besides, the Dutch study of van de Glind (2013) among 1330 Dutch citizens, found a significant relationship of environmental motives on the willingness to take part in SE. These studies imply that users are less interested in societal contributions, whereas providers are driven to participate in the SE because of societal contributions, such as sustainability.

The environmental factor refers to the idea that by using or sharing in the SE, people reduce the negative impacts on the environment as it for example reduces waste and utilize under-used assets (van de Glind, 2013). This reason is identified to positively influence attitude and drives individuals to participate in the SE (Buda and Lehota 2017; Sung, Kim and Lee, 2018; Hawlitschek et al., 2018; Tussyadiah, 2015, 2016b; ING, 2015a; van de Glind, 2013; Böcker and Meelen, 2017). In this study it is tested if environmental benefits influence attitude towards SE.

H3: Environmental benefits have a positive influence on attitude towards SE

Community belonging

Besides the social or people factor, an additional social variable is belonging to a community. A sense of being part of a community was shown to positively affect attitude towards SE (Hawlitschek et al., 2018). Furthermore, Tussyadiah and Pesonen (2016a) discovered that for P2P accommodation, the social appeal of community drives participation in SE. Specifically in the car sharing industry, Möhlmann (2015) found that the desire to be part of a community or community membership is an essential factor for engaging in SE activities. The study found a significant relationship between the desire to be part of a community and the intention to use the car sharing option (Möhlmann, 2015). Guttentag refers to community belonging as a sense of belonging which is the feeling that someone is part of a sharing community (Guttentag, 2015). The following hypothesis will be tested: *H4: Sense of belonging to a community has a positive influence on attitude towards SE*

Enjoyment of the activity

Enjoyment of the activity is particularly an intrinsic motivation as defined by Deci et al. (1999) and Eccles and Wigfield. (2002). Buda and Lehota (2017) identified that enjoyment of the activity affects participation in SE. The study of Tussyadiah (2016b) examined variables that affect satisfaction and future intention to use an accommodation sharing option and found that, out of all other variables, enjoyment resulted in the most explicit link with future intention. Besides affecting the intention to participate in SE, also attitude is shown to be affected by enjoyment. Hwang and Griffiths (2017) studied specifically what drives Millennials to participate in SE. The study revealed that hedonic value perception, which was measured by pleasure, comfort, and positive feelings resulting from engaging in SE, showed a dominant role in attitude. Besides, the data showed that the degree of pleasure and enjoyment perceived by the Millennials is vital for their attitude towards SE services (Hwang and Griffiths, 2017). Furthermore, during the in-depth interviews with Dutch consumers it was identified that people get enjoyment from sharing (van de Glind, 2013). One of the older interviewees explained that he enjoys interacting with other people (van de Glind, 2013). Enjoyment of the activity seems to be affecting both attitude and participation in SE. In this thesis it is tested if the perceived enjoyment results in a positive attitude towards SE.

H5: The perceived enjoyment of the activity has a positive influence on attitude towards SE

2.2.4 Deterrents

Process risks concerns

A potential deterrent of participating in SE is the perceived risk by the consumer. Practices of the SE are usually associated with more uncertainty and specific risks, compared to traditional businesses

(Hooshmand, 2015). Risks could include: not fulfilling one's expectations, failing communication, and not receiving the money, as identified by Hawlitschek et al. (2018). These risks can be named as process risk concerns and are identified to negatively affect attitude towards SE by Hawlitschek et al. (2018), Quintal et al. (2010) and Liao et al. (2009). Therefore, in this thesis it is tested if process risks concerns deter older individuals from sharing their goods/services by a negative influence on attitude towards SE.

H6: Process risks concerns have a negative influence on attitude towards SE

Expected effort

Expected effort refers to the effort the consumer expects to put in using a SE platform. Effort expectancy is identified as a key impediment in using SE (Hawlitschek et al., 2018). Hawlitschek et al. (2018) indicated that expected effort negatively affects attitude towards SE. Furthermore, the study of Tussyadiah (2015) examined drivers and deterrents specifically for accommodation sharing options and showed that consumers do not use a SE platform because the benefits perceived would not outweigh the effort of using the sharing option. Although this is especially the case for users, at the same time, providers could be deterred from sharing their goods/services because the extra income would not outweigh the effort of participating in SE. Furthermore, the study of Hawlitschek et al. (2018) recommends for further research to, among other variables, investigate effort expectancy as a deterrent of participating in SE. Therefore, expected effort is included in the conceptual model with the following hypothesis.

H7: Expected effort has a negative influence on attitude towards SE

Trust in users/platform

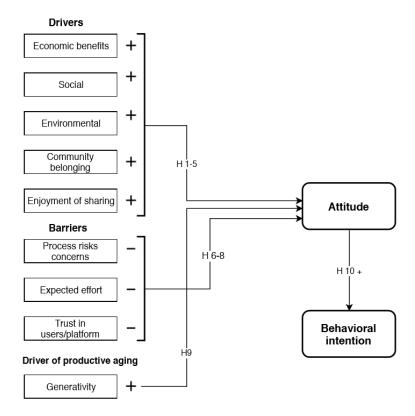
Trust has been recognized as an important driver and prerequisite for users of SE platforms (Olson, 2013; Ert et al., 2016; Hawlitschek et al., 2016; Mittendorf, 2017). Trust in others is also identified as a basic condition of participating in SE (Hawlitschek et al., 2018). Tussyadiah (2015) identified that lack of trust deterred travelers from using accommodation sharing services. Trust concerns here to distrust towards the host of the sharing accommodation. Nonetheless, providers could experience distrust towards their users and the platform that is used and it could play an important role for providers in avoiding participation. Lack of trust could deter providers from sharing their goods/services on SE platforms. A Dutch study of ING (2015a) identified three significant factors that hinder individuals from providing in the SE. One of these factors was because people don't trust it, where especially the older population are deterred by this factor (2015a). Lack of trust consists out of different forms of distrust, and in the case of ING (2015a) and also acknowledged by Keymolen

(2013), it refers to a lack of trust towards the technology or the platform. Hawlitschek et al. (2018) and Olson (2013) indicated that people are restrained from participating in SE because of a lack of trust in other users of SE platforms. According to Olson (2013) is trust the major obstacle for individuals. Tussyadiah (2015) confirmed this and identified that lack of trust deters individuals from utilizing peer-to-peer accommodations. Furthermore, privacy concerns and a lack of trust between strangers in general are indicated as deterrents (Olson, 2013).

In short, is lack of trust a potential deterrent for older individuals to participate in SE. Many researchers identified trust to play an important role for participation in SE (Hawlitschek et al., 2016, 2018; Ert et al., 2016; Mittendorf, 2017). Trust for providers refers to trust in the consumer as well as in the platform. The Dutch also seem to be hindered by trust as identified in a study of ING (2015a), and particularly the older Dutch individuals are deterred by a lack of trust. Therefore in this thesis the following hypothesis will be tested:

H8: (Lack of) trust in user/platform has a negative influence on attitude towards SE

The conceptual model in figure 1 presents all potential drivers and barriers for participation in SE as is discussed above.



2.2.5 Conceptual model

Figure 1: Potential drivers and barriers for participation in SE

The conceptual framework illustrates the potential relationships between drivers and barriers and attitude towards SE. Subsequently, it is expected that a positive attitude positively affects the behavioral intention to participate in SE. Table 2.1 presents an overview of all hypotheses.

	Overview of hypotheses
H1	Economic benefits have a positive influence on attitude towards SE
H2	Social benefits have a positive influence on attitude towards SE
H3	Environmental benefits have a positive influence on attitude towards SE
H4	Sense of belonging to a community has a positive influence on attitude towards SE
H5	The perceived enjoyment has a positive influence on attitude towards SE
H6	Process risks concerns have a negative influence on attitude towards SE
H7	Expected effort has a negative influence on attitude towards SE
H8	Lack of trust in the user/platform has a negative influence on attitude towards SE
H9	Generativity has a positive influence on attitude towards SE
H10	Attitude towards SE has a positive influence on intention to participate in SE
H11	Intrinsic motivations (social, environmental, community belonging, enjoyment and
	generativity) have a positive influence on attitude towards SE
H12	Extrinsic motivations (economic benefits) and enjoyment have a positive influence on
	intention to participate in SE

Table 2.1: Overview of hypotheses

2.2.6 Demographics & control variables

The demographics will be used as control variables as well as demographic factors which may influence attitude towards SE.

Income: The majority of SE platform users seem to have a high income (Olson, 2013; Tussyadiah, 2015), which is also the case for the Dutch people (ING, 2015a; NCDO, 2013). However, van de Glind (2013) who also studied Dutch people, indicated that an income increase, decreases the likelihood of participation in SE.

Education: Higher educated individuals are the major user group of SE and are the most likely to participate in SE (Campbel-Mithun, 2012; Ipsos Public Affairs, 2013; Hwang & Griffiths, 2014; Möhlmann, 2015; Olson, 2013; Tussyadiah, 2015; ING, 2015a).

Gender: Regarding gender, only Buda and Lehota (2017) indicated that the majority of SE users are female. Besides, the study of Dosman et al. (2006) show that women are more likely to participate in productive (aging) activities, especially in volunteering work.

Age: Indicated by many types of research, does the intention of participation in SE decreases by an increase in age (Hawlitschek et al., 2018; Godelnik, 2017; PwC, 2015a). Since this thesis is focused on older adults it is tested if this is also the case for this age group.

Chapter 3. Research Methodology

This section explains the methods of the conducted quantitative research. The measurement scales of the variables are described, as well as the development of these measurements. Furthermore, the methods of data collection and the sample characteristics will be reported. Finally, the reliability and validity of the used constructs will be discussed.

3.1 Development of quantitative study

Development of survey

The full survey is available in Appendix C in Dutch and English. The survey starts with a short welcoming text and an introduction to the subject of the research. Next, the concept and examples of the sharing economy are explained. This part is essential as it enables the respondents to have a better understanding of the following questions, and thus enables them to fill in reliable answers. Hereafter, the respondents have to indicate to what extent they would be motivated to provide on SE platforms. The motivators and deterrents are questioned separately. Likewise, in the next part, the respondent needs to register why they would be restrained for participation in SE. In the following part the respondent's familiarity with the sharing economy is questioned, by examining the use of platforms, if they are or have been a provider on a SE platform and which one(s) they've been using or sharing on. Hereafter, the respondent needs to indicate their attitude and willingness of participation in SE. These two constructs and items form the dependent variables. Hereafter, the factor 'generativity' is measured by two questions. Finally, the last part of the survey consists of the control variables, which include age, gender, education, income, and employment. The used items as measurements for the various constructs are derived from prior literature and are presented in Appendix D.

Development of measurement variables

Various verified items of constructs of previous studies are used in the questionnaire as measurements to explore the motivators and barriers to provide in SE. The adopted sources per question and items of each question are shown in Appendix D. The used statements were translated into Dutch and some minor modifications have been made to fit in the role of the provider instead of the user of the SE. All variables are based on the five-point Likert scale, ranging from 1: strongly disagree to 5: strongly agree. The majority of the items used in this project were derived from the studies of Tussyadiah (2016b), Sung, Kim and Lee (2018), Lamberton and Rose (2012), and Möhlmann (2015). Unfortunately, Hawlitschek et al. (2018), one of the major studies in the field of

drivers and barriers of participation in SE, did not validate the applied items or statements in the conducted research. Items of these factors are obtained from the explanation of Hawlitschek et al. (2018). For some factors, not all items of the previous used literature were included in the survey. These items solely suited the role of a user of SE or only concerned a specific sharing sector, and thus were difficult to translate into this study. For example, the statement 'Staying at a P2P accommodation allows me to get insider tips on local attractions', is not included in the current research to measure the 'social' factor. Attitude towards SE platforms and behavioral intention to share goods/services on SE platforms form the dependent variables. The variable attitude is a multi-item variable, based on the items used by Sung, Kim and Lee (2018) in testing attitude towards Airbnb. Behavioral intention includes one item, replicated from the study of Tussyadiah (2016b). A five-point Likert scale measured the dependent variables.

A total of 29 items corresponded to the constructs which include the dependent variables (attitude and intention), drivers ('economic', 'environmental', 'social', 'community belonging', 'enjoyment', 'generativity') and barriers ('expected effort', 'process risks' and 'trust'). Before sending out the final survey, it was sent to five graduate E-Commerce students to check for any mistakes or possible misunderstandings. After reflecting the feedback, the questionnaire was pretested by 15 people within the target group. Afterward, the survey was revised by the pretest result before sending it out. The revisions consisted of shortening the introduction, improving the explanation of the SE, and clarifying the role of the provider in the questions about motivators and barriers.

Measurement scales

The multi-item measurement factors are questioned by a Likert-scale. Likert-scales are originally considered as ordinal scale, implying that the values can be ranked. However, many studies have been using Likert scales as interval scales in analyzing the data (Diener et al., 1985; Watson, Clark, & Tellegen, 1988). H. Boone and D. Boone (2012) argue that when a series of (Likert-type) items correspond to a single variable, then the data should be analyzed at the interval measurement scale. Besides, they state that in the case where multi-items are being converged and create a single factor by calculating a composite score (sum or mean), the appropriate procedure for analyzing the data is interval scale with for example a regression analysis (H. Boone and D. Boone, 2012). Therefore, the items that are measured by a Likert-scale in this study are categorized as interval data in SPSS.

Sample size calculation

The target group for this thesis are individuals at the age of 45 years or older. Establishing the age at 45 years enabled the researcher to compare retired individuals with working individuals. The men and women from 45 years and older accounted in 2018 for 47% of the total population (CBS, 2018). The market size of people from 45 years and older totals 8.078.116 people in the Netherlands (CBS, 2018). Obtaining a sample size that would be representative of this target group was not achievable, and instead, a number of 139 respondents took part in the quantitative study. With a sample size of 139 individuals and a confidence level of 95%, the margin error was set at 8.3% (Checkmarket, 2019), implying that estimates in the analysis (e.g., means and percentages) were within +/- 8.3% of the population parameter, 95% of the time.

3.2 Methods of analysis

Data collection

Data for this study is obtained through a survey that is developed in Qualtrics and analyzed using IBM SPSS Statistics 24. In order to collect data for this thesis project and test the proposed hypotheses, the questionnaire is shared online and offline. Sharing the survey offline enabled the researcher to target suitable individuals more adequately to fill in the survey. The target group of people of 45 years or older was challenging to obtain online for the researcher. Several respondents were gathered through real-life conversations followed by sending them the link by e-mail to fill in the survey. Consequently, online responses were mixed with offline gathered respondents. The researcher used her direct network to distribute the survey and used ambassadors, which were mainly older family members and friends, to further spread the questionnaire. By using the researcher's direct network, the majority of the responses came from her municipality (Westland). The ambassadors who shared the questionnaire were located in The Hague, Amsterdam, and Groningen. Because of the mixed methods of offline and online sharing, it was not possible to estimate the response rate of this survey. The response rate of individuals who were approached in real life was in general very high; only a few individuals refused to fill in the questionnaire. In order to increase the response rate, the introduction of the survey informed people that it was possible to win a prize. The prize consisted of a coupon of €15 for Bol.com. However, not everyone seemed to be motivated by this as only 33% of the respondents filled in their e-mail address to win the prize.

Sample characteristics

The survey has been published and shared offline from June 25th, 2019 to July 12th, 2019, which resulted in 139 completed responses. All questions in the online survey were forced, which delivered

only completed responses. However, approximately ten surveys, filled in real-life, were uncompleted. These uncompleted surveys were excluded from the data. At the moment of analysis, 42 online surveys were still in progress. However, without the expectation of further completion, since these participants only reached the first question. All demographic characteristics of the sample are reported in Table 3.1. The total sample of people included 139 respondents, with an almost even spread of men and women with 55% women and 45% men. Most of the respondents fall into the age range of 55-64 years and 45-54 years. The majority of the participants are full-time (32%) or part-time (27%) employees. The number of retired respondents totals 23%, and 44% of these retired participants are active in one of the productive aging activities. The majority of the respondents graduated with a Bachelor's degree (in Dutch: hbo diploma) and earned a net monthly income of EUR 1.750-2.999 (37%).

Variable	Specification	Percentage
Gender	Male	45%
	Female	55%
Age	45-54	35%
	55-64	45%
	65-74	18%
	75-84	2%
	85 years and older	0%
Education	None	1%
	High school (in Dutch:	18%
	middelbare school)	32%
	Secondary vocational	40%
	education (in Dutch: mbo)	7%
	Bachelor	1%
	Master	
	Doctor	
Employment situation	Full-time	31%
	Part-time	27%
	Retired	13%
	Retired and active in one of	10%
	these activities: volunteering,	
	caregiving, paid/unpaid work	
	Unemployment	2%
	Entrepreneur	9%
	Unable to work	6%
	I'd rather not say that	2%
Monthly net income	Less than EUR 1.750	22%
	EUR 1.750-2.999	37%
	EUR 3.000 or more	22%
	I don't know	1%
	I'd rather not say that	17%

Table 3.1: Sample characteristics

The respondents recorded their current participation and use of SE practices, which is presented in Table 3.2, and 83% of them never used SE practices. Most of the respondents who used SE platforms only used it once (6%), or two to five times a year (6%). Only a small proportion of the participants provided or are providing on SE platforms, a total of nine respondents accounting for 7% of the total sample size. This implied that the researcher was mainly measuring drivers and barriers of individuals who are not yet providing in SE.

Variable	Specification	Percentage
Use of SE platforms	Never	83%
	Once	6%
	Total of 2-5 times	6%
	1-4 times per year	3%
	5-10 times per year	3%
	More than 10 times per year	0%
Providing in SE	Yes	7%
	No	93%

Table 3.2: Users and providers in the survey

3.3 Reliability and validity of constructs

Sufficient sample size

The reliability of factor analysis is dependent on the size of the sample, factor loadings, and communalities (Field, 2018). Various 'rules of thumb' exist, and a commonly adopted one is to have a minimum of 10-15 respondents per variable (Field, 2018). A total of 29 items implies a minimum sample size of 290 individuals, which is not achieved (139) in this project. However, its empirical support is not clear (Field, 2018). Comrey and Lee (1992) argue that a sample size of 100 is labeled as poor, 300 as good, and 1.000 as excellent. A different indicator of sampling adequacy is the Kaiser-Meyer-Olkin (KMO) test, which will be discussed in section 3.4.1. Besides, concerning communalities, MacCallum et al. (1999) suggest that if all communalities are above .6, relatively small samples (less than 100) may be perfectly adequate. Furthermore, communalities in the .5 range suggest that samples between 100 and 200 can be good enough. The output of the communalities of the factor analysis in SPSS (Table E3 Appendix E and Table F3 Appendix F) shows that four items are below the .6 and all items are more than .5. The sample size accounted for 139 people within the range of .5, thus the sample size is identified as sufficient for analysis, according to the criteria of MacCallum et al. (1999).

Correlation matrix

Before analyzing Cronbach's Alpha and factor loadings using SPSS, it is vital to conduct a correlation matrix to search for items with values less than .3 or more than .9 (Field, 2018). Variables with a value of less than .3 might not fit in the pool of items and variables with a value of r > .9 correlate too much and might cause collinearity (Field, 2018). The correlation matrix does not contain values higher than .8, meaning that there is no multicollinearity among the variables. The output of the Correlation matrix is presented in Appendix E Table E1 for drivers and Appendix F Table F1 concerning the barrier items. The correlations of the driver items illustrates one item with little correlation with another item. The items PRO_1 and EFF_2 are very low correlated, since r < .2. In addition, the driver items show several items below the threshold value of .3. However, the researcher did not see any reason to delete these from the analysis at this stage.

3.4.1 Factor analysis, KMO and Cronbach's Alpha

In order to measure the reliability and validity of the constructs, factor analysis is performed consisting out of a principal component analysis (PCA) with orthogonal rotation (varimax). The factor analysis is performed separately for the drivers and barriers items. The output of the KMO and Bartlett's test is presented in Appendix E Table E2 for drivers and Appendix F Table F2 for barriers. The KMO measure of sampling adequacy indicates a value of .771 and .809 for driver and barrier items respectively, which is well above the minimum criterion of .5. These values fall into the category 'Middling' and 'Meritorious' according to the categorization of Kaiser and Rice (1974). Furthermore, Bartlett's test of sphericity was significant for both tests, since p < .001. Bartlett's measure and the KMO value indicated that the sample size would be adequate for factor analysis, and there was no need to collect more data.

Dependent variables

Attitude and behavioral intention form the dependent variables. Whereas a single item measured intention, attitude is measured through multi-items. First, the correlations between the items of attitude were checked, as shown in Table 3.3. All three items correlate, and there is no multicollinearity (r > .8). Hereafter, the scale of the items were checked by testing Cronbach's alpha (Appendix G Table G3). Cronbach's alpha values a = .833 which is labeled as good. Besides, deleting an item did not deliver a higher Cronbach's alpha. Therefore, the three items correspond to the factor attitude.

Correlation			
Items of attitude	ATT_1	ATT_2	ATT_3
ATT_1: Overall, I think it is a wise move to share	1.000	.610	.701
products/services on a SE platform			
ATT_2: All in all, I think the sharing economy is a positive	.610	1.000	.567
thing			
ATT_3: All in all, I think it makes sense to share on	.701	.576	1.000
sharing economy platforms			

Table 3.3: Correlation matrix of the multi-item dependent variable attitude

Barriers

Initially, the barrier items totaled a number of seven items, which were assumed to belong to three factors as reported in Appendix D. Based on Kaiser's criterion, the items should be suppressed to two components where the Eigenvalue is greater than 1, as presented in Table F4 Appendix F. These two factors explain 62% of the total variance. Since three factors were expected, the analysis was rerun while demanding for three factors (table F6-F7 Appendix F). Unfortunately, also this matrix did not display the items belonging to the assumed factors. However, it was expected that these items probably would not fall into the assumed factors, as these items were not derived from previously used statements. Hawlitschek et al. (2018) did not validate the used statements of the study. The adopted statements in this project were based on only the explanation of the variables as described by Hawlitschek et al. (2018). The Rotated Component Matrix in Table 3.4 shows that EFF_2 does not load high with EFF_1, the other item belonging to 'expected effort'. This is in line with the mean of this factor, which is quite different compared to the other item of 'expected effort' or any other variable (table F8 Appendix F). In order to validate that EFF_1 and EFF_2 should not be combined, a reliability test is performed (table F9 Appendix F). Cronbach's Alpha consists of α = .514, which is labeled as poor. Besides, the description of the statements varies, where EFF_2 concerns to obtaining not enough economic benefits and EFF_1 refers to the time and effort spent in the activity. Therefore, EFF_2 is renamed as the variable: NO_ECO, which stands for 'not enough gain'. The item EFF_1 is renamed as 'expected effort'.

Table 3.4: Rotated Component Matrix for Barrier items

Rotated Component Matrix ⁸	
---------------------------------------	--

	С	omponent	
	1	2	3
TRU_1	,868		
PRO_1	,777	,307	
TRU_2	,584		,448
EFF_1		,728	,359
PRO_3		,725	
PR0_2	,509	,709	
EFF_2			,861
Analysis.	ethod: Varin	cipal Compo nax with Kais	

Legenda I would be demotivated to share my products/services on a SE platform TRU_1: because I would be concerned about my privacy on the platform TRU_2: because I wouldn't trust the people who war to use my products/services PRO_1: because I would be concerned about my safety PRO_2: because I would be afraid of not receiving th money PRO_3: because I'm concerned the communication between the buyer and me will go wrong EFF 1: because I expect that the benefits do not	
PRO_3: because I'm concerned the communication	
EFF_2: because it wouldn't provide me sufficient extra income	

Furthermore, the factor loadings in Table 3.4 indicate that several items load highly with each other. Converging TRU_1, PRO_1, and TRU_2 sounded logical to the researcher since PRO_1 concerns safety and TRU_1 refers to privacy, which are both negative suspicions towards the SE. Additionally, after following up with Cronbach's alpha (Table F10 Appendix F), alpha indicates a value of α = .739. The column Cronbach's Alpha if Item Deleted suggests that Cronbach's alpha would not be higher by deleting PRO_1. Thus, it makes sense to combine these variables. The items PRO_1, TRU_1, and TRU_2 form the factor 'negative suspicions'. Lastly, Table 3.4 illustrates that PRO_2 and PRO_3 load highly with EFF_1. However, the statements of these items did not seem to be combined logically into one construct. After following up with Cronbach's alpha (Table F11), valuing α = .702, the output illustrates that alpha would indeed be higher by deleting EFF_1. In short, three components were initially expected, but after factor analysis and logical reasoning, four factors corresponded to the barrier components. An overview of all factors, including factor loadings, means and Cronbach's alpha is reported in Table 3.6.

Drivers

The factor analysis was also performed for the drivers of SE by conducting a PCA with varimax rotation (table E1-E6 Appendix E). First of all, the data showed that the items of 'community belonging' did not appear to be measuring the same variable. The data (table E4 Appendix E) suggests that five factors correspond to the eighteen items, whereas six were expected based on the literature studies. However, the Eigenvalue for six factors is .982, which is just below Kaiser's criterion of 1. Therefore, the factor analysis was rerun by demanding six components. The six factors

explain 73% of the total variance. However, the Rotated Component Matrix in Table E5 (Appendix E) did not contain logic components. The items COM_1 and COM_2 load highly with other items, and a closer look at the correlations matrix (table E1), illustrates that these items correlate very low with most of the variables. Therefore, the factor analysis was rerun while excluding the items of 'community belonging'. The Rotated Component Matrix in Table 3.5 presents the assumed variables loading high with each other. The item ENV_4 is the only item that does not belong explicitly to a single item and has equal factor loadings with 'environmental' and 'enjoyment' variables.

Rotated Component Matrix ^a					
		С	omponent		
	1	2	3	4	5
EC0_1				,827	
ECO_2		·		,818	
SOC_1			,62B		
SOC_2			,775		
SOC_3			,B34		
ENV_1		,822			
ENV_2		,842			
ENV_3		,846			
ENV_4	,537	,544			
ENJ_1	,51 D		482		
ENJ_2	,54B		456		
ENJ_3	,B27				
ENJ_4	,806				
ENJ_5	,653		,351		
GEN_1					,788
GEN_2					,855

Table 3.5: Rotated Component Matrix for Driver items

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Legenda
I would be motivated to share my products/services on SE platforms
ECO_1: by the extra money I'd make with sharing my products/services
ECO_2: because I'd make me more financially stable
SOC_1: it allows me to have a more meaningful interaction with people
SOC_2: it allows me to get to know people from the local neighborhoods
SOC_3: it allows me to develop social relationships
ENV_1: because it allows me to reduce the negative impact on the environmentENV_2: because
the use of the SE reduces the use of natural resources
ENV_3: because sharing is a more sustainable way of living
ENV_4: because it reflects my environmentally friendly behavior
ENJ_1: because sharing on a SE platform seems fun
ENJ_2: because sharing seems like an exciting experience to me
ENJ_3: because sharing on a SE platforms seems interesting
ENJ_4: because sharing on a SE platform would satisfy my curiosity
ENJ_5: because sharing on a SE platform would give me pleasure
GEN_1: I feel engaged and concerned about the well-being of the future generation
GEN_2: I believe it is important to pass on my knowledge and skills to the younger generation
COM_1: because it allows me to be part of a group of like-minded people
COM_2: because it allows me to belong to a group of people with similar interests

Additionally, to check for internal consistency among the constructs, Cronbach's alpha is performed for all factors as presented in Table 3.6 and Table H1-H6 Appendix H. Cronbach's alpha should be more than $\alpha > .7$, which is the desired value according to Field (2018). The 'generativity' factor has a Cronbach's alpha of α = .591, which falls into the category 'poor' (Field, 2018). Although this is lower than the desired $\alpha > .7$, the two items do correlate with each other, and it was not assumed that these items would fit better around other items or should be deleted from the data. Therefore, both items are included and will be combined into the 'generativity' factor. The other remarkable aspect is that leaving out ENV_4 of the factor 'environment' leads to a higher Cronbach's alpha. Taking into account that ENV_4 did not correlate (table E1 Appendix E) or loaded well (Table 3.5) on the other 'environment' items, it is decided to exclude ENV_4. Besides, the column Cronbach's Alpha if Item Deleted (table H3 Appendix H) illustrates that deleting ENV_4 increases Cronbach's alpha from α = .797 towards α = .842. Furthermore, the construct 'community belonging' has a Cronbach's Alpha of .444, which is labeled as unacceptable (Field, 2018). The correlation matrix shows that COM_1 is almost not correlated with attitude and will therefore be excluded in the analysis. The remaining factors all contain Cronbach's alpha above the desired value $\alpha > .7$, implying that all constructs were consistent among each other and measured the same variable.

The remaining constructs are presented in Table 3.6, including the mean of the factors, Cronbach's alpha, and factor loadings. In the next section, the results of the survey are presented, while analyzing this with the constructs as described in this part.

Measures	Factor loading	Cronbach's alpha	Mean
Attitude		.833	
ATT_1	.892		3.61
ATT_2	.833		3.88
ATT_3	.877		3.50
Economic		.727	
ECO_1	.827		3.06
ECO_2	.818		2.54
Social		.754	
SOC_1	.628		3.47
SOC_2	.775		3.41
SOC_3	.834		3,05
Environmental		.842	
ENV_1	.822		3.78
ENV_2	.842		3.68
ENV_3	.846		3.92
Community belonging			3.24
(COM_2)			
Enjoyment of sharing		.846	
ENJ_1	.510		2.99
ENJ_2	.548		3.23
ENJ_3	.827		2.56
ENJ_4	.806		2.77
ENJ_5	.653		3.07
Generativity		.591	
GEN_1	.855		3.94
GEN_2	.788		3.88
Process risks concerns		.722	
PRO_2	.725		3.30
PRO_3	.709		3.09
Expected effort (EFF_1)			3.20
Not enough gain (EFF_2)			2.65
Negative suspicions		.739	
TRU_1	.868		2.80
TRU_2	.584		2.86
PRO_1	.777		2.89

Chapter 4. Results

This chapter presents the results of the survey. First, the data is checked on several assumptions that preferably all need to be confirmed. Meeting these assumptions indicates that the performed tests are more accurate. Hereafter, the regression analysis is conducted, to test the relationship between the independent variables and the dependent variable. Finally, differences between groups of the survey are explained.

4.1 Overview of assumptions

To test the hypotheses, a multiple linear regression analysis is performed using SPSS. Before conducting this analysis, the data has to be verified on the assumptions of multiple linear regression. When all assumptions are sufficed, it is validated to perform a linear regression (Field, 2018). However, as this project does not contain much data (139 responses), several assumptions might be violated. The key assumptions are discussed in order of importance: additivity and linearity, independent errors, homoscedasticity, and normally distributed errors (Field & Wilcox, 2017; Gelman & Hill, 2007). First, this section starts by spotting outliers in the data.

4.1.1 Outliers

Outliers are values that differ substantially from the main data. They can influence the estimate of the regression analysis (Field, 2018). Consequently, it is crucial to spot outliers and, if necessary, exclude them from the data. Attitude showed two extreme cases of outliers (indicated with *), as presented in Figure I1 (Appendix I), which fall far out of the range of the boxplot. The dots show the respondent who responded with these values. A closer look at these data points revealed that these two participants were extremely negative and filled in the same values for almost every question. Therefore, before validating the assumptions, these two outliers were excluded from the data, which resulted in 137 valid responses.

4.1.2 Additivity and linearity

The assumption of additivity and linearity is the most important one, because if the relationships are not linear then, even if all other assumptions are met, the model is invalid to use for linear regression analysis (Field, 2018). The relationship between the variables should not be curvilinear, as this makes investigating the data with a linear regression impracticable (Field, 2018). The assumption of linearity and homoscedasticity (see section 4.1.4) is checked within the same test. The P-P plot in Figure I2 and the scatterplot in Figure I3 (Appendix I) exhibit a linear relationship of the independent variables on the dependent variable (attitude). Therefore, the assumption of additivity and linearity is met.

4.1.3 Independent errors

The second assumption of independent errors suggests that the errors in the model should not be related to each other (Field, 2018). Simpler said, it means that the responses of the respondents are independent of each other. Violating this assumption signifies that the performed confidence intervals and significance tests will be invalid (Field, 2018). The Durbin-Watson test can validate this assumption. However, this test only makes sense when there is a meaningful order in the data. Since the survey is random spread, there is no meaningful order in this research. Therefore the assumption is checked through a scatterplot which is presented in Figure 13 (Appendix I). The scatterplot illustrates that all dots are between 3 and -3, which is desired for the assumption of independent errors. In addition, the dots should exhibit a rectangle, which is not the case. Besides, they showed a high concentration in the range of -1 and 1.

4.1.4 Homoscedasticity

The assumption of homoscedasticity refers to the idea that the variance of the residual terms should be constant at each level of the independent variables (Field, 2018). Violating this assumption means that the produced confidence intervals and significance tests are not optimal to use. Besides, Wilcox (2010) argues that confidence intervals will be extremely inaccurate when the assumption of homoscedasticity is violated. Additionally, estimates of the model (parameters b) would be valid but not optimal to use (Field, 2018). The assumption of homoscedasticity is examined through the same scatterplot as presented in Figure 13 (Appendix I). For each value of the predictors, the variance of the error term should be constant in the scatterplot. That means that the residual of each level of the independent variables should have the same variance. When the distance of the error stays approximately consistent along the line, which is displayed in the scatterplot in Figure 14, then the assumption of homoscedasticity is met. Although the errors do not change much of distance along the line, there is a high concentration above the line between -1 and 1. Therefore, it could be assumed that there is a form of heteroscedasticity, implying that the residual terms are not constant at each level.

4.1.5 Normally distributed errors

The assumption of normally distributed errors implies that the sample should be normally distributed. For confidence intervals around a parameter and significance tests of models to be

accurate, the estimate must come from a normal sampling distribution (Field, 2018). Besides, in order to have optimal estimates in the model (the b's in the equation), the residuals must be normally distributed in the population (Field, 2018). A P-P plot is conducted to validate the assumption of normal distribution. The Normal P-P plot indicates a normal distribution if the values fall on the diagonal line in the plot. The P-P plot is presented in Figure I2 (Appendix I) and illustrates that all values follow the line and fall closely on the line. In addition, the histogram in Figure I5 shows that the data follows the normal distribution line. The results indicate that the residuals are normally distributed and the assumption of normally distributed errors is met.

4.1.6 Conclusion of the assumptions

The assumptions of the linear model are mostly confirmed. The relationship is linear and verified the key assumption of additivity and linearity. The histogram and Normal P-P plot illustrated that the errors are normally distributed. However, the errors in the scatterplot illustrated more heteroscedasticity and violate the assumption of homoscedasticity. Finally, the assumption of independent errors is partially validated as the errors showed a high concentration and were not randomly spread. The violations and confirms of the assumptions indicate how accurate the confidence intervals and significance are in the multiple regression analysis. Considering that not all assumptions are confirmed, it is therefore not possible to accurately estimate the likely population value, and thus no generalization can be made. The next section describes the performed multiple regression analysis.

4.2 Multiple linear regression analysis

This part describes the performed regression analysis examining the effect of the barriers 'process risks', 'negative suspicions', 'expected effort', and 'not enough gain', and the drivers 'economic', 'social', 'environmental', 'community belonging', 'enjoyment', and 'generativity' on attitude towards SE.

4.2.1 Drivers and barriers in a linear regression

Multiple linear regression analysis is conducted by including the barrier and drivers variables and control variables into the model as predictors/independent variables and attitude towards SE as the dependent variable. The results of the linear regression in SPSS presented several relevant statistics. First of all, the correlations between the predictors and between predictors and the outcome variable were checked, since the assumption of multicollinearity was not yet checked in section 4.1.

Multicollinearity is generated by multiple predictors that correlate too highly (Berry, 1993). The correlation matrix in Table J1 Appendix J does not contain predictors that correlate highly since all correlations are r < .8. Additionally, the predictors must have some correlation with the dependent variable attitude, at least with r > .3 (Field, 2018). The correlation matrix illustrates that the variables 'generativity', 'negative suspicions', 'expected effort', and 'not enough gain' correlate below the threshold of .3. Furthermore, the F-test (table J2) is significant (p < .001) and indicates that the model significantly fits in the overall data. The R Square has a value of .489, and suggests that the included predictors account for 48.9% of all variation in the dependent variable.

The driver predictors have positive b-values, as presented in Table 4.1, and indicate a positive relationship with attitude. Thus, as 'economic', 'social', 'environmental', 'enjoyment', 'generativity', and 'community belonging' increase, the attitude towards SE increases. The barrier predictors revealed one unexpected relationship since the factor 'expected effort' presents a positive relationship with attitude. 'Expected effort' seems to be driving instead of decreasing attitude towards SE, although this relationship is insignificant. The results in Table 4.1 indicate a significant result for 'economic', 'environmental', and 'not enough gain' factors. The factors 'social', 'enjoyment', 'generativity', 'community belonging', 'expected effort', 'process risks', and 'negative suspicions' have a p-value of more than .05 and do not significantly predict attitude towards SE. The Standardized Coefficient column allows comparing the variables with each other. The 'environmental' factor appears to be the most powerful contributing factor in predicting the dependent variable, compared to all other variables. The factor 'not enough gain' has the second largest effect on attitude. The factors 'economic', 'social' and 'negative suspicions' have approximately the same effect on the dependent variable, although 'social' and 'negative suspicions' do not have a significant effect on attitude. The Constant estimate presents a significant result and indicates that without the predictors taken into account, the attitude towards SE platforms is 1.87. The Unstandardized Coefficients in column B indicate the increase in attitude by one increase in the specific variable. For example, if 'economic' increases by one, the attitude towards SE platforms increases by .119, ceteris paribus (while holding all other variables constant).

The four estimates ending with control are the included control variables in the analysis. The estimates are coded as either one or zero and have the variable name of the code one. For example, being a woman (woman=1, man=0) increases attitude towards SE by .110, ceteris paribus, although this is an insignificant result. Besides, being already a provider (provider=1, no provider= 0) in the SE increases attitude by .147 and being older (65 years or above= 1, 64 years or younger=0) increases

attitude by .212, despite the fact that these results are also insignificant. Being retired decreases attitude towards SE by .216, although also this result was insignificant.

	Unstandardized	l Coefficients	Standardized		
			Coefficients		
	В	Std. Error	Beta (β)	t	Sig.
(Constant)	1.870	.433		4.316	.000***
Economic	.119	.050	.191	2.394	.018**
Social	.112	.073	.134	1.528	.129
Environmental	.274	.061	.317	4.482	.000***
Enjoyment	.090	.079	.113	1.140	.257
Generativity	.078	.074	.076	1.059	.292
Community belonging	.042	.056	.065	.747	.457
Expected effort	.024	.043	.044	.574	.567
Not enough gain	134	.052	205	-2.556	.012**
Process risks	040	.063	062	637	.525
Negative suspicion	102	.067	138	-1.524	.130
Woman_control	.110	.081	.097	1.371	.173
Provider_control	.147	.155	.066	.948	.345
Retired_control	216	.161	164	-1.339	.183
Older_control	.212	.169	.153	1.254	.212

Table 4.1: Linear regression coefficients table for the relationship between all the independent variables, the control variables and the dependent variable attitude

Note: * = $p \le .10$, ** = $p \le .05$, *** = $p \le .01$

To conclude, the variables 'economic' and 'environmental' are the only significant factors, driving attitude towards SE platforms, whereas 'not enough gain' is the only significant barrier, decreasing individuals' attitude towards SE platforms. Based on the outcomes of the multiple linear regression, the following equation has been made for predicting attitude towards SE:

Attitude towards SE

= 1.870 + .119 × Economic + .274 × Environmental – .134 × Not enough gain + ε_i

4.2.3 Intrinsic versus extrinsic motivations

The literature argues that intrinsic motivations affect attitude towards SE platforms, whereas extrinsic motivations and enjoyment of sharing affect intention to participate in SE (Hamari et al., 2015). The included intrinsic motivations in the model are: 'social', 'environmental', 'community belonging', 'generativity', and 'enjoyment'. Extrinsic motivation contains only the 'economic' variable.

The output of the multiple linear regression for intrinsic motivations is presented in Table K1 Appendix K. The linear regression analysis for intrinsic motivations has an R Square of .396, indicating that intrinsic motivations predict 39.6% of all variance in attitude. In addition, the F-test is significant, p < .001, which verifies that the values are fitting in the overall data of the model. Table 4.2 illustrates a significant relationship for all coefficients with a p-value of less than .05, except for 'generativity'. Besides, 'community belonging' presents a significant but negative relationship with attitude. Therefore, the hypothesis is partially supported, since three out of five intrinsic motivations were significant and positively affect attitude towards SE.

	Unstandardize	d Coefficients	Standardized		
			Coefficients		
	В	Std. Error	Beta (β)	t	Sig.
(Constant)	1.006	.349		2.882	.005***
Social	.275	.074	.326	3.730	.000***
Environmental	.334	.060	.326	3.730	.000***
Enjoyment	.175	.069	.217	2.535	.012**
Generativity	.082	.074	.079	1.104	.272
Community	116	.054	181	-2.144	.034**
belonging					

 Table 4.2: Linear regression coefficients results for the relationship between the intrinsic motivations predictors and the dependent variable attitude

Note: * = $p \le .10$, ** = $p \le .05$, *** = $p \le .01$

The variables 'economic' and 'enjoyment' were regressed with intention as hypothesized in hypothesis H12. The output of the analysis is shown in Table K2 Appendix K. The regression analysis for extrinsic motivation and 'enjoyment' has an R Square of .232, which demonstrates that extrinsic motivation and 'enjoyment' explain 23.2% of all variance in the intention to provide in SE. Furthermore, the F-test indicates a significant result, with a p < .001. Table 4.3 illustrates that the

estimates significantly influence the intention since the p-values are below the significance criterion of .05. Extrinsic motivation and 'enjoyment' significantly affect the intention to provide in SE, which confirmed the hypothesis.

	Unstandardize	d Coefficients	Standardized		
			Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	1.244	.310		4.010	.000***
Economic	.266	.082	.268	3.233	.002***
Enjoyment	.389	.106	.305	3.684	.000***

 Table 4.3: Linear regression coefficients results for the relationship between extrinsic motivation

 (economic benefit) and enjoyment and the dependent variable intention

4.2.4 Linear regression of attitude on intention

The mean of attitude was on average relatively high (M= 3.7, SE= .56) and the mean of intention slightly lower (M= 3.14, SE= .89), as reported in Table L1 Appendix L. Furthermore, Table L2 presents the percentages for the variable intention to participate in SE. The majority was neutral regarding their future participation (41%), and more agreed on their future intention to participate (38%), than disagreed (21%). Attitude has been regressed with the intention to provide in SE. Appendix L Table L3 presents the output of the linear regression analysis. The significant F-test (p < .001) suggests that the model has a good fit with the overall data. Besides, the R Square values .470 and indicates that 47% of the total variance in intention is explained by attitude. Table 4.4 illustrates a positive relationship of attitude on intention. Attitude has a positive and significant effect on intention since p < .001, and confirmed hypothesis 10.

	Unstandardized Coefficients		Standardized		
			Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	871	.371		-2.350	.020**
Attitude	1.083	.099	.686	10.955	.000***

Note: * = $p \le .10$, ** = $p \le .05$, *** = $p \le .01$

4.2.5 Overview of rejected and supported hypotheses

An overview of the supported and rejected hypotheses are presented below.

	Overview of hypotheses	
H1	Economic benefits have a positive influence on attitude towards SE	Supported
H2	Social benefits have a positive influence on attitude towards SE	Rejected
Н3	Environmental benefits have a positive influence on attitude towards SE	Supported
H4	Sense of belonging to a community has a positive influence on attitude towards SE	Rejected
H5	The perceived enjoyment has a positive influence on attitude towards SE	Rejected
H6	Process risks concerns have a negative influence on attitude towards SE	Rejected
H7	Expected effort has a negative influence on attitude towards SE	Partially supported
H8	Lack of trust in the user/platform has a negative influence on attitude towards SE	Rejected
H9	Generativity has a positive influence on attitude towards SE	Rejected
H10	Attitude towards SE has a positive influence on intention to participate in SE	Supported
H11	Intrinsic motivations (social, environmental, community belonging, enjoyment and generativity) have a positive influence on attitude towards SE	Partially supported
H12	Extrinsic motivations (economic benefits) and enjoyment have a positive influence on intention to participate in SE	Supported

4.3 Differences between socio-demographic groups

This part describes the differences in the average of attitude between socio-demographic groups in the survey. Section 2.1.2 outlined several typical characteristics of users of the SE, and section 2.2.6 described several findings regarding socio-demographic differences. Although no hypotheses have been made concerning group differences, it gives interesting insights regarding group differences. Differences between groups are tested through Independent Samples t-tests, concerning the demographic variables of gender, age, education, employment, and income. Differences between socio-demographic variables have been examined on the dependent variable attitude.

Men versus women

Buda and Lehota (2017) identified that the majority of SE users are female and the study of Dosman et al. (2006) identified that women are more likely to participate in productive aging activities. T-tests have been performed to compare the means of attitude towards SE for men and women. The results in Table M1 (Appendix M) indicate that, on average, women score higher on attitude towards SE (M= 3.8, SE= .06), compared to men (M= 3.6, SE= .07). The difference of .2 was significant with a p-value of .03, which is below the significance criterion of .05. In addition, the Bootstrap confidence interval illustrates that it does not cross zero and indicates that the differences will not be zero. The bootstrap confidence interval suggests that attitude significantly differs between men and women, and that in general women score higher on attitude towards SE than men.

Young versus old

The age in the survey ranges from 45 years or older, measured at an ordinal scale. In order to compare the younger individuals to older individuals, two new variables have been created. The 'young' variable contains individuals ranging from 45 years to 64 years, and the 'old' variable consists out of individuals from 65 years and older. The results (table M2) from the independent t-test indicate that, on average, younger individuals score higher on attitude towards SE (M= 3.71, SE= .06), compared to the older individuals (M=3.65, SE= .10). However, the difference of .06, was not significant, since the *p*-value = .6, which is higher than the significance criterion of .05. Furthermore, the Bootstrap Table indicates that the confidence interval passes zero, ranging from -1.6 to .30, and illustrates that the differences between the two groups could be zero. Thus, there are no significant differences between the two groups could be zero. Thus, there are no significant

Differences in employment

Several t-tests have been performed to compare the average of attitude towards SE, concerning several employment situations, as presented in Table M3-M5 in Appendix M. Working individuals (part-time, full-time and entrepreneurs) were compared to retirees. The results of the t-test in Table M3 illustrate that the mean of working individuals is in general higher (M= 3.7, SE= .06), in comparison to retirees (M= 3.6, SE= .09). The difference was not significant with a p-value of .38 > .05. Secondly, retired individuals were compared to all other employment variables (part-time, full-time, entrepreneur, unemployed, and disabled to work). The mean of retirees scored in general lower on attitude (M= 3.6, SE= .09), compared to the other individuals (M= 3.7, SE= .06). However, this was an insignificant result since the p-value is .43, which is above the significant criterion of .05. Lastly, working individuals were compared to individuals who don't work (retirees, unable to work)

and unemployed). The mean of working individuals was slightly higher (M= 3.7, SE= .06), in comparison to the non-workers (M= 3.6, SE= .08). This difference was not significant with a p-value of .33. In conclusion, the tests illustrate that there are no significant differences in the average of attitude regarding several employment situations.

Low educated versus high educated

Higher educated individuals are the major users in SE and the most likely to participate in SE (Campbel-Mithun, 2012; Ipsos Public Affairs, 2013; Hwang & Griffiths, 2014; Möhlmann, 2015; Olson, 2013; Tussyadiah, 2015; ING, 2015a). Lower educated individuals (no education, high school and secondary vocational school) were compared to higher educated individuals in the survey (Bachelor degree, Master degree or Doctor degree) on their attitude towards SE (Table M6 Appendix M). The group mean of lower educated individuals was slightly lower (M= 3.69, SE= .07), compared to higher educated individuals (M= 3.71, SE= .07). This minimal difference of .02 was not significant (p-value = .81 > .05), implying that there are no significant differences between lower and higher educated individuals in their attitude towards SE.

Differences between income groups

The key users of SE platforms appear to have a high income (Olson, 2013; Tussyadiah, 2015; ING, 2015a; NCDO, 2013). This study investigated three income groups: low (less than ≤ 1.750), middle ($\leq 1.750 - \leq 2.999$), and high (≤ 3.000 and more). T-tests were performed to test the differences in attitude between low and high, between low, middle and high and between low and middle, and high income groups. The output of these tests are reported in Table M7-M9 Appendix M. The results indicate that there are no significant differences in the average of attitude between income groups, since all p-values are more than .05.

<u>Conclusion</u>

The results from the multiple linear regression identifies two motivators and one key impediment that significantly influence attitude towards SE. Subsequently, a positive attitude significantly affects intention to provide in SE. The factors 'social', 'enjoyment', 'generativity', 'community belonging', 'expected effort', 'process risks', and 'negative suspicions' do not significantly affect attitude towards SE. The factor 'environment' has a significant effect on attitude and appears to be the strongest contributing factor in predicting the dependent variable, compared to all other variables. The barrier factor 'not enough gain' has the second largest effect on attitude and significantly decreases attitude towards SE. Besides, the factor 'economic' shows a positive significant

relationship with attitude and thus increases the intention to participate in SE. Whereas the economic benefits motivate to participate, it also restrains individuals from participation when the perceived economic benefits are insufficient. Furthermore, in line with the hypothesis concerning extrinsic motivation, it was indicated that extrinsic motivation and 'enjoyment' significantly influence intention to participate. Intrinsic motivations are only partially influencing attitude towards SE. The intrinsic motivations 'social', 'environmental' and 'enjoyment' have a positive significant relationship with attitude. The factor 'community belonging' shows a significant but negative relationship and the factor 'generativity' does not have a significant relationship with attitude. The differences in attitude towards SE between socio-demographic groups indicate a significant difference for men and women. The results indicate that, on average, women score higher on attitude towards SE compared to men. The differences between age, employment situations, income and education are all small and insignificant.

Chapter 5. Conclusion and Discussion

In this part, the research question which has been described in Chapter 1 will be answered. Conclusions that have been drawn from the results of the study and the literature research will answer the central question. The general discussion also describes the theoretical implications of the study. Additionally, recommendations to the sharing economy industry will be made which are the practical implications. Lastly, the research limitations and directions for future research will be described.

5.1 General discussion

The purpose of this thesis is to gain insight into the drivers and deterrents of older individuals to take part as a provider on sharing economy (SE) platforms. The central question is answered through literature studies and quantitative research. The outcomes present contradictions and agreements with previous studies and will be discussed below.

The overall attitude towards SE is relatively high in this data (M= 3.7, SE= .89). The likelihood of sharing goods/services on SE platforms in the future is overall lower (M= 3.14, SE= .56). The majority of the respondents are neutral (41%) about their future participation as a provider in the SE. Nonetheless, more respondents agree or strongly agree (38%) on their future intention to provide in SE, than those who disagree or strongly disagree (21%). Furthermore, the study identifies several motivators and deterrents of participation in the SE. The central question of this thesis is: "Which underlying factors drive or deter older individuals from taking part as a provider in the sharing economy?" The study identifies two distinct motives as significant, economic benefits and environmental benefits, and one key impediment which is the fact that the perceived economic benefits are insufficient. These three variables influence attitude towards SE platforms significantly. Furthermore, attitude has a positive influence on the intention to share goods/services on SE platforms.

Conform the literature studies of intrinsic and extrinsic motivations it was presumed that intrinsic motivations would primarily drive attitude towards SE platforms, whereas extrinsic motivations and 'enjoyment' would drive intention to participate in SE (Hamari et al., 2015). The results of the study are partially in line with the study of Hamari et al. (2015). The data shows that extrinsic motivation and the enjoyment from the activity indeed influence intention to provide in SE significantly. The conducted quantitative study identifies partial support for the hypothesis of intrinsic motivations.

The intrinsic motivations predictors show several significant relationships, and the results identify that social benefits, environmental benefits, and the perceived enjoyment have a positive and significant effect on attitude. Community belonging significantly influence attitude, although it decreases attitude. In addition, the 'generativity' factor did not show a significant relationship with attitude.

Based on the literature of productive aging, the generativity factor was tested. The generativity factor was identified by Mor-Barak (1995) to play an important role in the meaning of work for older individuals. However, the generativity factor does not appear to be driving individuals to engage in SE platforms in this study, thus highly generative consumers do not lead to better attitudes towards SE. The results identify an insignificant relationship between the generativity factor and attitude. Besides, the generativity factor shows little correlations with all variables and might not fit in the pool of variables. Thus, whereas generativity seems to be driving older individuals to work, it does not motivate them to participate in the SE.

Besides the generativity factor, also economic and financial factors were suggested to drive older individuals to stay productive (Mor-Barak, 1995). In addition, several literature studies identify these variables to have a significant relationship with attitude towards SE or intention to participate in SE. The social factor was hypothesized to significantly influence attitude towards SE and therefore the intention to participate. Literature research suggests that particularly providers of the SE are more driven by social reasons compared to users (Böcker and Meelen, 2017; Bellotti et al., 2015; Sung, Kim and Lee, 2018). In addition, older individuals are also identified to be driven more by social benefits as examined by Böcker and Meelen (2017). Furthermore, the Socio-Emotional Selectivity theory of Carstensen (1995) argues that older people attach more value to emotionally meaningful interactions and goals. However, the results of the quantitative study contradict these literature studies and the Socio-Emotional Selectivity theory. The social factor does not significantly influence attitude towards SE. This was an unexpected finding, since particularly the Dutch studies of Böcker and Meelen (2017) and van de Glind (2013) were assumed to have similar results with this thesis. Böcker and Meelen (2017) identified that people of 65 years and older were significantly more driven by social reasons, compared to all other categories. Although this study could not make a comparison between younger and older individuals, as it was focused only on older individuals, the social factor is not even significant. Therefore, for people in the age of 45 years and older, the social benefits of sharing has no significant effect on attitude, thus no motivating effect on the intention to provide in SE.

On the other hand, economic benefits significantly affect attitude towards SE. The opposite was assumed, as the literature argues that older individuals are more motivated by social reasons and less motivated by economic reasons. Additionally, Böcker and Meelen (2017) suggest that users are more likely to be motivated by economic reasons, whereas social reasons more strongly motivate providers. However, the results of this study are consistent with various studies that identify a significant effect of economic benefits on attitude towards SE (Sung, Kim and Lee, 2018; Hawlitschek et al., 2018) or intention (Buda and Lehota, 2017; Hamari et al., 2015; van de Glind, 2013; Tussyadiah, 2015, 2016a, 2016b). In addition, the result is in line with the game theory's prisoner's dilemma of Rapoport and Chammah (1970) and 'The Logic of Collective Action' of Olson (1965) that suggest that consumers' decisions are based on rational reasoning and self-interest of individuals, to either save costs, minimize (transaction) costs, or maximize utility. Thus, as assumed, older individuals are motivated by the economic benefits sharing on SE platforms can provide.

The environmental factor is the only significant factor of the remaining drivers. This result builds on existing evidence of several Dutch and international studies. ING (2015a) indicated that Dutch providers are more idealistic compared to users, and an environmental driver primarily motivates providers; to reduce waste. Additionally, the Dutch studies of Böcker and Meelen (2017) and van de Glind (2013) identified a significant relationship between attitude and the intention to participate. In line with these findings, the environmental benefits are motivating older individuals to share goods or services on SE platforms, and show to be the most contributing factor in predicting attitude. The drivers enjoyment and community belonging do not significantly influence attitude towards SE, and contradict the findings in the studies of the literature review. Hawlitschek et al. (2018) suggest that community belonging positively affects attitude towards SE. Additionally, Tussyadiah (2015) and Möhlmann (2015) identified a significant relationship between community belonging and intention to participate in SE. A possible explanation for the contradiction of these results is because the study of Tussyadiah (2015) is focused on the sharing accommodation industry and the study of Möhlmann (2015) on the car sharing industry. Besides, the survey of Hawlitschek et al. (2018) is mainly filled in by Millennials. In addition, this could also be a possible clarification for the rejection of the hypothesis of the factor 'enjoyment'. Results of the study of Hwang and Griffiths (2017) show that the degree of pleasure and 'enjoyment' perceived by the Millennials is vital for their attitude towards SE. The results of this study do not reflect enjoyment to be a driver for older individuals. The Dutch research of van de Glind (2013) suggest that especially the older participants get enjoyment from sharing. Thus, motives for individuals who are currently sharing products/services on SE platforms might differ from those who are not a provider in SE.

The barrier variables show that 'not enough gain' was the only significant factor. The factors expected effort, process risks, and 'negative suspicions' were not significantly influencing attitude towards SE. The 'not enough gain' factor stated as 'I would be demotivated because it would not bring me sufficient extra income,' was identified to decrease attitude towards SE significantly. As a result, it would discourage people from providing in SE. This finding is consistent with the study of Tussyadiah (2015), that showed that users did not use a SE platform because the benefits perceived would not outweigh the effort of using the sharing option. The economic benefits are driving people to provide in SE, while at the same time it restrains people from providing in SE when the perceived economic benefits are insufficient. The remaining impediment factors (process risks, expected effort and trust in user/platform) might be not significant because the literature studies were not confound about this barrier. There is a lack of research in barriers of using a sharing option, and more research might be necessary to validate these barriers.

5.2 Recommendations to the SE industry

The findings of this study give interesting insights for SE platforms, either start-up companies or existing platforms. The practice of the SE is only achievable when it reaches a critical mass. Besides, particularly providers are vital for platforms, as Martin Voorzanger explains that when nobody provides a ride, nobody can find a ride, regarding the car sharing sector (M. Voorzanger, personal communication, December 2012). This study provides insights for consumers of 45 years and older and their drivers and deterrents for sharing their goods/services on SE platforms. Since the number of older individuals is becoming substantially larger, this market segment is an attractive target group for SE platforms. There is little knowledge about this segment and their underlying drivers or deterrents concerning participation in the SE. This research bridges the gap of knowledge by identifying two significant drivers and one key impediment. The identified factors are controllable and can be used to predict an older individual's attitude towards SE and ultimately can alter sharing propensity. These insights are relevant for SE platform operators who want to attract new providers for their platform. Furthermore, the results are particularly relevant for platforms that want to attract the market segment of 45 years or older. Marketers or platform operators could adjust their platforms and marketing strategy based on the findings in the following ways.

First, the results reveal that the environmental factor emerges as the strongest driver. A positive attitude towards SE is driven by the environmental motivation to reduce the negative impacts on the

environment, to adopt a more sustainable way of life, and to reduce the use of natural resources. Thus, for platform operators and marketers it is important to reflect the environmental friendly side of the SE. Clarifying on how individuals can contribute to a more sustainable way of life and reduce natural resources should be the focal points of platform operators.

Secondly, marketing activities should respond to the fact that consumers want to benefit their selfinterest and gain a sufficient amount of money with sharing on SE platforms. Consumers seem to be triggered by the economic benefits it can provide. Therefore, SE platforms should promote their platform to potential providers by clarifying the additional gain of income it will provide individuals. Finally, platforms should clearly communicate how their platform works, and attempt to lower consumers' concerns of too little benefits. The results showed that the factor 'not enough gain' was the only significant factor in decreasing attitude towards. In order to reduce the barrier of participation, it is vital to shed light on the fact that the additional income would be sufficient.

5.3 Research Limitations and Directions for Further Research

The interpretation of the results should be considered with several limitations of the study. Some of these limitations lead to recommendations for further research, which will also be described in this part.

To obtain a sample that is representative for the Netherlands, the number of respondents should have been more than the obtained 139 respondents. The total population size of people of 45 years or older in the Netherlands accounted in 2018 for 8.078.116 people, which is 47% of the total population (CBS, 2018 December). A population size of 8.078.116 people, a margin error of 2%, and a confidence level of 95% signify that a sample size of 2.400 respondents is required for a representative study (Checkmarket, 2019). Although obtaining this number of respondents was not achievable for the researcher and not the purpose of this research, it presents one of the limitations of this study. Additionally, a larger sample will automatically produce better results in the analysis with SPSS. The distribution of the sample would be normally distributed through a larger sample, and also confidence intervals and significance would be more accurate and valid to use. Although the purpose of this research was not to obtain such a substantial sample size, it makes it impracticable to make valid generalizations about the real population of the Netherlands. As a direction for further research, a larger sample is therefore recommended.

Furthermore, only quantitative research has been performed, whereas qualitative research could have brought some helpful and interesting insights. The researcher did speak with several

respondents who filled in the survey in real-life. However, these results were not included in the research as it was not a conceived research. Combining quantitative research with qualitative research will lead to a qualitatively better research, and is advised to conduct in further research.

As a result of the relatively small sample, it was not possible to test for differences between providers and non-providers of the SE. Respondents of the survey who already provided in SE included only nine persons, accounting for 7% against 93% who did not provide in SE. Consumers who are not providing in the SE could be motivated by different variables, compared to consumers who are already providers in SE. Therefore, for future research, it is proposed to examine drivers and deterrents for both current providers and non-providers. This could provide relevant insights in attracting non-providers to start participating in the SE and how to let providers continue sharing their goods/services on SE platforms.

Limitations of the conducted quantitative research are related to the questionnaire. Even though the questionnaire was pre-tested, there could still be a chance of misunderstandings or faults of interpretability. The concept and explanation of the SE could be misunderstood, and participants may have overlooked the role of the provider. In addition, the imaginative power of the respondents plays an important role for some of the questions. Consequently, this had an impact on the validity of the results.

In this thesis, older individuals who are not yet taking part as a provider in the SE were in the majority in the study. A proportion of only 7% of the study consisted of current providers of the SE. The drivers and deterrents are therefore identified in particular for potential providers. Several broadly investigated and significant identified variables, among social and community belonging, did not show a significant result in this study. Therefore, as a direction for further research, it would be interesting to investigate drivers and deterrents of current providers at the age of 45 years and older.

Chapter 2 presents prior literature studies, and based on these results the hypotheses have been developed. Unfortunately, including all potential identified relevant factors was out of scope of this thesis project. Therefore, the researcher recommends for further research to take into account the variables that have not been covered in the quantitative study. Hawlitschek et al. (2018) found that anti-capitalistic views have a positive impact on attitude towards SE. Furthermore, Ozanne and Ballantine (2010) indicated that anti-consumption serves as a driver of sharing, and Lamberton and

Rose argued that sharing can serve as a statement of anti-capitalistic or anti-materialistic views. Anti-capitalistic views could drive individuals to participate, and is recommended to investigate in further research. Another potential driver of sharing is altruism. The NCDO indicated that people adhere more strongly to altruistic values when they are into sharing. Individuals who adhere to altruistic values could be more likely to share their goods/services on SE platforms and is recommended to examine in further research. Tussyadiah (2015) identified a significant deterrent of sharing and found that a lack of information to use the system deterred individuals of using it. Besides, a qualitative Dutch study of van de Glind (2013) revealed that interviewees did not use SE platforms because they did not have information about it or heard about it. Another impediment could be unfamiliarity with the technology of SE platforms. Möhlmann (2015) discovered that individuals are restrained from participation in SE because they're unfamiliar with using the SE system. Besides, on the opposite, being familiar with the SE platform is identified to positively influence both attitude towards SE and intention of participation (Hawlitschek et al., 2018). Lastly, being afraid of sharing could be a potential barrier for people to share their goods/services on SE platforms. A Dutch research institute NCDO investigated the SE in the Netherlands, including reasons why people won't share (NCDO, 2013). One of those reasons was because people don't like to share their belongings or are afraid it will get broken (NCDO, 2013). Thus, the following variables are proposed for further research: anti-capitalism, altruism, lack of information, and familiarity with the technology.

The last note of the researcher's point of view is that she believes that society would be better off if consumers start providing in the SE. If people are true rational creatures, which they seem in this study, then it would be logical to engage in the SE, either as a user or a provider. The researcher spoke with several respondents, and they appeared to be very skeptic about the sharing economy, but also unaware of the existence of this new economy. Reducing the skepticism and creating more awareness among consumers about the sharing economy and the benefits it has to offer could be valuable for society. Participation will either save or gain money for the individual, and it would reduce the negative impacts on the environment, and that is where the Dutch 'older' consumers (in this study) appear to be particularly interested in.

References

Azjen, I. (1991). The theory of planned behavior. *Organizational Behavior Human Decision Process,* 50, 179-211

Bellafante, G. (2018, August). Uber and the False Hopes of the SE. *The New York Times*. Retrieved from https://www.nytimes.com/2018/08/09/nyregion/uber-nyc-vote-drivers-ride-sharing.html

Bellotti, V., Ambard, A., Turner, D., Gossmann, C., Demkova, K., & Carroll, J.M. (2015). A muddle of Models of Motivation for Using Peer-to-Peer Economy Systems. CHI'15: Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems, Seoul, April 18-23 2015, 1085-1094

Bengtson, V. L., & Schaie, K. W. (1999). Handbook of theories of aging. New York: Springer

Berry, W. D. (1993). *Understanding regression assumptions*. Sage University Paper Series on Quantitative Applications in the Social Sciences, 07-092. Newbury Park, CA: Sage

Bloom, D. E., Canning, D. & Fink, G., (2011). Implications of population aging for economic growth. NBER Working Paper Series. http://www.nber.org/papers/w16705

Boone, H. N., Boone, D. A. (2012). Analyzing Likert Data. Journal of Extension, 50(2)

Botsman, R. & Rogers, R. (2011). What's Mine is Yours: The Rise of Collaborative Consumption. New York, NY: Harper Business.

Bossé, R., Aldwin, C. M., Levenson, M. R., & Ekerdt, D. J. (1987). Mental Health Differences among Retirees and Workers: Findings from the Normative Aging Study. *Psychology and Aging*, *2*(4), 383-389

Buda, G., & Lehota, J. (2017). Attitudes and motivations of consumers in SE. Management, Enterprise and Benchmarking in the 21st Century

Carstensen, L.L. (1995). Evidence for a life-span theory of socioemotional selectivity. *Current Directions in Psychological Science*, *4*(5), 151–156. https://doi.org/10.1111/1467-8721.ep11512261

Carlson, M. C., Erickson, K. I., Kramer, A. F., Voss, M. W., Bolea, N., Mielke, M., & Fried, L. P. (2009). Evidence for neurocognitive plasticity in at-risk older adults: the experience corps program. Journal of Gerontology, 64(12), 1275-1282

CBS. (2018, October). Bevolking; kerncijfers. Retrieved from http://statline.cbs.nl/Statweb/publication/?VW=T&DM=SLNL&PA=37296ned&D1=0-8,11-68&D2=0,10,20,30,40,50,60,67-68&HD=190604-1644&HDR=G1&STB=T

CBS. (2018, December). Bevolkingspiramide. Retrieved from https://www.cbs.nl/nlnl/visualisaties/bevolkingspiramide

Checkmarket. (2019). Sample size calculator. Retrieved from https://www.checkmarket.com/sample-sizecalculator/?_ga=2.128292428.1198032402.1559655366-620870973.1559655366

Choudary, S.P. (2013). Why business models fail: Pipes vs Platforms. Wired Magazine

Comrey, A., & Lee, H. B. (1992). *A first* course *in factor analysis* (2nd ed.) Hillsdale, NJ: Erlbaum Cornwell, B., Laumann, E. O., Schumm, L. P. (2008). The social connectedness of older adults: a national profile. *Am. Sociol. Review*, *73*(2), 185-203

Deci, E. L., Koestner, R., Ryan, R. M. (1999). A meta-analytic review of experiments examining the effects of extrinsic rewards on intrinsic motivation. *Psychology Bulletin*, *125*, 627-668

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic Motivation and Self-Determination in Human Behaviour*. New York: Plenum

Deeleconomie in Nederland. (n.d.). Deeleconomie in Nederland. Retrieved from http://www.deeleconomieinnederland.nl/

Diener, E. D., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of personality assessment*, 71-75

Dosman, D. Fast, J. Chapman, S.A., & Keating, N. (2006). Retirement and productive activity in later life. *Journal Fam. Econ. Iss, 27*, 401-419

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, *53*, 109-132

Ert, E., Fleischer, A., & Magen, N. (2016). Trust and reputation in the SE: the role of personal photos in Airbnb. *Tourism Management*, *55*, 62-73

European Commission. (2017). *Exploratory study of consumer issues in online peer-to-peer platform markets*. Retrieved from http://ec.europa.eu/newsroom/just/item-detail.cfm?item_id¼77704. (Accessed 1 May 2019)

Field, A. (2018). Discovering Statistics Using IBM SPSS Statistics (5th ed.). London, England: SAGE

Field, A. P., & Wilcox, R. R. (2010). Robust statistical methods: a primer for clinical psychology and experimental psychopathology researchers. *Behaviour Research and Therapy.*

Frenken, K., Schor, J. (2017). Putting the SE into perspective. *Environmental Innovation and Societal Transitions*, *23*, 3-10

Fried, L. P., Carlson, M. C., Freedman, M., Frick, K. D., Glass, T. A., Hill, J., & Zeger, S. (2004). A social model for health promotion for an aging population: initial evidence on the experience corps model. *Journal of Urban Health: Bulletin of the New York Academy of Medicine, 81*(1), 64-78

Gansky, L. (2010). The Mesh: Why the Future of Business is Sharing. New York, NY: Portfolio Penguin

Gelman, A., & Hill, J. (2007). *Data analysis using regression and multilevel/hierarchical models*. Cambridge: Cambridge University Press.

Godelnik, R., (2017). Millennials and the SE: lessons from a 'buy nothing new, share everything month' project. Environ. Innov. Soc. Transitions 23, 40-52

Guay, F., Chanal, J., Ratelle, C. F., Marsh, H. W., Larose, S., & Boivin, M. (2010). Intrinsic, identified, and controlled types of motivation for school subjects in young elementary school children. *British Journal of Educational Psychology*, *80*(4), 711-735f

Guttentag, D. (2015). Airbnb: disruptive innovation and the rise of an informal tourism accommodation sector. *Current Issues Tourism, 18*, 1192-1217

Hamari, J., Sjöklint, M., & Ukkonen, A. (2015). The sharing economy: why people participate in collaborative consumption. *Journal of the Association for Information Science and Technology.* Version of Record online: 2 JUN 2015, DOI: 10.1002/asi.23552.

Hawlitschek, F., Teubner, T., & Gimpel, H. (2018). Consumer motives for peer-to-peer sharing. *Journal of Cleaner Production, 204*, 144-157

Hawlitschek, F., Teubner, T., Weinhardt, C. (2016). Trust in the SE. *Swiss Journal of Business Research Pract., 70*, 26-44

Head, L. (2013). "Will Millennials drive the shift from a consumption-based to a values-based economy?" Retrieved from www.sustainablebrands.com/news_and_views/behavior_ change/will-millennials-drive-shift-consumption-basedvalues-based-economy

Hellwig, K., Morhart, F., Girardin, F., & Hauser, M. (2015). Exploring different types of sharing: a proposed segmentation of the market for sharing businesses. *Psychology & Marketing*, *32*(9), 891-906

Herzog, A. R., Kahn, R. L., Morgan, J. N., Jackson, J. S., & Antonucci, T. C. (1989). Age differences in productive activities. *Journal of Gerontology*: Social Sciences, 44, S129–S138.

Hicks, P. (2002). Preparing for tomorrow's social policy agenda: New priorities for policy research and development that emerge from an examination of the economic well-being of the working age population. Ottawa: Social Research and Demonstration Corporation.

Hong, S. I., & Morrow-Howell, N. (2010). Health outcomes of experience corps: a high commitment volunteer program. *Social Science & Medicine*, *71*, 414-420

Hooshmand, M. (2015). The risks of being a host in the SE: a look at short-term rentals and the liability and public-policy problems they present. Plaintiff Mag. Retrieved from http://www.plaintiffmagazine.com/recent-issues/item/the-risks-of-being-a-host-in-the-sharing-economy

Hwang, J., Griffiths, M. A. (2017). Share more, drive less: Millennials value perception and behavioral intent in using collaborative consumption services. *Journal of Consumer Marketing*, *34*(2), 132-146

Hyun-Hoon, L., Hyeon-seung, H., Young-Youn, L., & Jae-Young, L., (2013). Effects of Population Aging on Economic Growth. *Seoul Journal of Economics, 26*(4), 401

ING (2015a). *Rapport Deeleconomie: ruim half miljoen huishoudens doen mee.* Retrieved from https://www.ing.nl/media/Deeleconomie%20in%20kaart_tcm162-87219.pdf

ING (2015b). *What's mine is yours – for a price*. Retrieved from https://www.ezonomics.com/ing_international_surveys/sharing_economy_2015/

International Monetary Fund. (2017, March). *Cost of Aging*. Retrieved from https://www.imf.org/external/pubs/ft/fandd/2017/03/pdf/lee.pdf

Kaiser, H. F., & Rice, J. (1974). Little jiffy, mark 4. *Educational and Psychological Measurement, 34*(1), 111-117

Kelly, J. R. (1997). Activity and ageing: Challenge in retirement. In J. T. Haworth (Ed), *Work, leisure and well-being*, 165-179, London, UK: Routledge

Keymolen, E. (2013). Trust and technology in collaborative consumption. Why it is not just about you and me. In Leenes, R. E., & Kosta, E. (Eds.), Bridging Distances in Technology and Regulation (pp. 135-150). Oisterwijk: Wolf Legal Publishers

Kooij, D. T. A. M., de Lange, A. H., Jansen, P. G. W., Kanfer, R., & Dikkers, J. S. E. (2010). Age and work-related motives: Results of a meta-analysis. *Journal of Organizational Behavior*. DOI: 10.1002/job.665

Lacroix, C., & Jolibert, A. (2015). Targeting Consumers Who Care about Future Generations, *Psychology & Marketing*, *32*(8), 783

Lamberton, C.P., & Rose, R.I. (2012). When is ours better than mine? A framework for understanding and altering participation in commercial sharing systems. *Journal of Marketing*, *76*, 109-125

Liao, C., Lin, H., & Liu, Y. (2009). Predicting the use of pirated software: a contingency model integrating perceived risk with the Theory of Planned Behavior. *Journal of Business Ethics, 91*, 237-252

Levene, H. (1960). Robust tests for equality of variances. In I. Olkin, S. G. Ghurye, W. Hoeffding, W. G. Madow, & H. B. Mann (Eds.), *Contributions to probability and statistics: Essays in honor of Harold Hotelling* (pp. 278-292). Stanford, CA: Stanford University Press

Maestas, N., Mullen, K. J., & Powell, D. (2016). The Effect of Population Aging on Economic Growth, the Labor Force and Productivity. NBER Working Paper Series. http://www.nber.org.papers/w22452

Mittendorf, C. (2017). What trust means in the SE: a provider perspective on Airbnb.com. Am. Conf. Inf. Syst. 1-10

Möhlmann, M. (2015). Collaborative consumption: determinants of satisfaction and the likelihood of using a SE option again. *Journal of Consumer Behaviour, 14,* 193-207

Mor-Barak, M. E. (1995). The meaning of work for older adults seeking employment: the generativity factor. *International Journal of Aging and Human Development, 41*(4), 325-344

Mor-Barak, M. E., Scharlach, A. E., Birba, L., Garcia, G., & Sokolov, J. (1992). Employment, social networks and health in the retirement years. *International Journal of Aging and Human Development*, *35*(2), 142-157

61

Morrow-Howell, N., & Wang, Y. (2013). Productive Engagement of Older Adults: Elements of a Cross-Cultural Research Agenda. *Ageing International*, *38*, 159-170

NCDO. (2013). *Nederlanders & De Deeleconomie*. Retrieved from http://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=2ahUK EwjI7KjFvo7iAhWxsaQKHeutBIMQFjAAegQIAhAC&url=http%3A%2F%2Fkaleidosresearch.nl%2Fdown load%2F2015%2F08%2F2013-Nederlanders-en-de-deeleconomie.pdf&usg=AOvVaw2UgzKUIZ-PMV8GbNknUq61

Olson, K. (2013). National Study Quantified Reality of the "Sharing Economy" Movement. Retrieved from http://www.campbell-mithun.com/678_national-study-quantifiesreality-of-the-sharing-economy-movement

Ouishare TV. (2013). *Markus Barnikel: Is Social Media Holding Back Collaborative Consumption?* [Youtube]. Retrieved from https://www.youtube.com/watch?v=PTMneVvbayY

Ozanne, L.K., & Ballantinw, P.W. (2010). Sharing as a form of anti-consumption? An examination of toy library users. *Journal of Consumer Behaviour, 9*, 485-498

Powell, J. L., (2010). The Power of Global Aging. Ageing International, 35(1), 1-14

PwC. (2015a). *The Sharing Economy – Consumer Intelligence Series*. Retrieved from https://www.pwc.com/us/en/technology/publications/assets/pwc-consumer-intelligence-series-the-sharing-economy.pdf

PwC. (2015b). The Sharing Economy – Sizing the revenue opportunity. Retrieved from http://www.pwc.co.uk/issues/megatrends/collisions/sharingeconomy/the-sharing-economy-sizingthe-revenue-opportunity.html

Quintal, V. A., Lee, J.A., & Soutar, G.N. (2010). Risk, uncertainty and the theory of planned behavior: a tourism example. *Tourism Management, 31*, 797-805

Raina, P. (2017, October 16). It's time to treat aging as an asset, not a burden. Retrieved from http://theconversation.com/its-time-to-treat-aging-as-an-asset-not-a-burden-85576

Ranzini, G., Newlands, G., Anselmi, G., Andreotti, A., Eichhorn, T., Etter, M., Hoffmann, C.P., Jürss, S., & Lutz, C. (2017). Millennials and the SE: European Perspectives (Working paper)

Rebell, B. (2015). "Millennials will outgrow the Sharing Economy ". Retrieved from http://time.com/money/3957652/ sharing-economy-millennials/

Rife, J., & Firse, R. J. (1989). Discouraged Older Workers: An Exploratory Study. *International Journal of Aging and Human Development, 29*(3), 195-203

Rifkin, J. (2014). The zero marginal cost society: the internet of things, the collaborative commons, and the eclipse of capitalism, Palgrave MacMillan, New York, NY

Rushe, D. (2019, May). What is Uber? Forget the SE – it's just a libertarian scam. *The Guardian*. Retrieved from https://www.theguardian.com/commentisfree/2019/may/09/uber-sharingeconomy-ride-share-ipo

Shen, H. (2017). Resource and strategic mobilization model of productive aging: Examining older Americans' participation in various productive activities. *Ageing International, 42*, 23-43

Soumerai, S. B., & Avorn, J. (1983). Perceived health, life satisfaction, and activity in urban elderly: A controlled study of the impact of part-time work. *Journal of Gerontology, 38,* 356-362

Sung, E., Kim, H., & Lee, D. (2018). Why Do People Consume and Provide Sharing Economy Accommodation? A Sustainability Perspective. *Sustainability*, *10*(6), 2072

Tussyadiah, I. (2015). An exploratory on drivers and deterrents of collaborative consumption in travel. Information and Communication Technologies in Tourism 2015: Proceedings of the International Conference in Lugano, Switzerland, February 3-6, 2015. 817-830

Tussyadiah, I.P., & Pesonen, J. (2016a). Drivers and barriers of peer-to-peer accommodation stay – an explanatory study with American and Finnish travelers. Curr. Issues Tourism 1-18

Tussyadiah, I.P. (2016b). Factors of Satisfaction and Intention to Use Peer-to-Peer Accommodation. *International Journal of Hospitality Management, 55*, 70-80. DOI: 10.1016/j.ijhm.2016.03.005

United Nations, Department of Economics and Social Affairs, Population Division. (2017). World Population Prospects: The 2017 Revision, Online Demographic profiles. Retrieved from https://population.un.org/wpp/Graphs/DemographicProfiles/

United Nations. (2017b, June 21). World population projected to reach 9.8 billion in 2050, and 11.2 billion in 2010. Retrieved from https://www.un.org/development/desa/en/news/population/world-population-prospects-2017.html

Van Alstyne, M.W., Parker, G.G., & Choudary, S.P., (2016). 6 reasons platforms fail. Harvard Business Review

Van de Glind, P. (2013). The consumer potential of collaborative consumption. Master's Thesis, University of Utrecht, Utrecht, The Netherlands

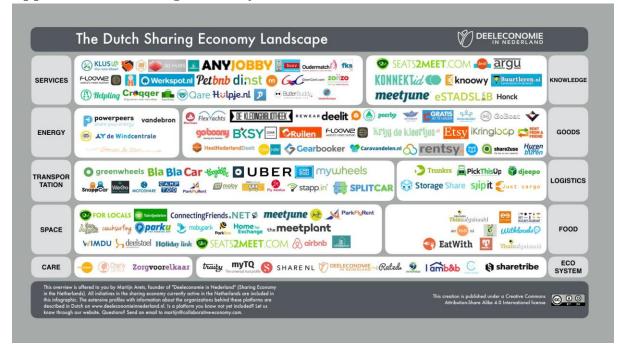
Walsh, B. (2011). Today's smart choice: Don't own. Share. *Time*. Retrieved from http://content.time.com/time/specials/packages/article/0,28804,2059521_2059717_205 9710,00.html

Watson, D., Clark, A. L., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of personality and social psychology*

Wells, V. K., Taheri, B., Gregory-Smith, D., & Manika, D. (2016) The role of generativity and attitudes on employees home and workplace water and energy saving behaviours, *Tourism Management*, *56*, 63-74

Wilcox, R. R. (2010). *Fundamentals of modern statistical methods using R.* Hoboken, NJ: John Wiley & Sons

Appendices



Appendix A - Sharing economy in the Netherlands

Appendix B - Literature overview	
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Authors	Research	Conclusions	Methods
Buda and Lehota, 2017	Buda and Lehota	Data from the survey	18 in-depth interviews,
	identified what	showed the following	two focus groups and
	motivates consumers	factors affecting the	an online survey with
	to use sharing-based	participation:	452 respondents
	community services by	sustainability,	
	executing 18 in-depth	economic benefit,	
	interviews, two focus	enjoyment of the	
	groups, and an online	activity, the	
	survey. This study used	importance of an	
	the research of Hamari	evaluation system, and	
	et al. (2015), which	advanced digital	
	identified the main	platform	
	motivation factors to		
	be: sustainability,		
	enjoyment of the		
	activity, and economic		
	benefits		
Sung, Kim and Lee,	Sung, Kim and Lee	The study found that	An online survey was
2018	investigated the	economic benefits,	executed with a total
	motivations of both	social relationships,	of 322 consumers
	users and providers of	perceived network	using or providing
	the SE platform Airbnb	effect, and	Airbnb. Of the
		sustainability affects	respondents, 100

		the attitude towards	providers filled in the
		the SE platform	questionnaire
		positively.	
		Subsequently, a	
		positive attitude	
		affects the intention to	
		participate in the SE	
		platform positively	
Hawlitschek et al.,	Hawlitschek et al.	Data found twelve	This study based their
2018	(2018) based their	motives with a	research on prior
	research on prior	significant influence on	literature, consisting
	literature, consisting	the dependent	out of 43 different
	out of 43 different	variables, which are:	studies, and identified
	studies, to investigate	financial benefits,	17 prospective
	motives of either	variety, ubiquitous	motives of either
	participating or	availability, social	participating or
	avoiding SE platforms.	experience, process	avoiding SE platforms.
		risk concerns,	Accordingly, they
		independence through	tested the hypotheses
		ownership,	through two surveys
		sustainability, sense of	with 745 and 776
		belonging, familiarity,	participants
		effort expectancy, and	
		trust in others.	
		Furthermore, the	
		variables attitude,	
		behavioral control,	
		and subjective norm	
		had a significant	
		impact on the	
		intention to use SE	
		platforms	
Hwang and Griffiths,	Hwang and Griffiths,	The study revealed	120 college students at
2017	studied what drives	that empathy is an	a large US university
	participation in	important emotional	filled in the
	collaborative	driver of sharing	questionnaire
	consumption,	behavior. The degree	
	specifically for	of pleasure and	
	Millennials	enjoyment perceived	
		by the Millennials is	
		vital for their attitude	
		towards collaborative	
		consumption services	
Möhlmann, 2015	Möhlmann	In both industries, the	In the first study, 236
	investigated factors of	following variables	users of a car sharing
	satisfaction and the	predominantly	service responded to
	intention to use a	explained the	the survey. The second
	sharing option. The	intention to use a	study was filled in by
	research was	sharing option: utility,	187 users of an
	specifically focused on	trust, familiarity, and	accommodation
	the car sharing and	cost savings. Besides,	sharing platform.

	L		
	accommodation	in the car sharing	
	sharing industry.	industry also service	
		quality and community	
		belonging influence	
		the intention to use a	
		car sharing platform	
Tussyadiah, 2016b	Tussyadiah examined	Data showed that	Tussyadiah executed
	variables that affect	enjoyment, social	an online survey
	satisfaction and future	benefits, and	among 644 travelers in
	intention to use an	economic benefits	the United States
	accommodation	affect future	
	sharing option	intentions to use an	
		accommodation	
		sharing option.	
		Enjoyment resulted in	
		the most explicit link	
		with future intentions.	
Tussyadiah, 2015	Tussyadiah	Economic benefits	The study gathered
	investigated drivers	were identified as the	data from 754
	and deterrent of	main driver to use	responses, constituting
	collaborative	accommodation	out of US adult
	consumption in the	sharing option	consumers
	travel industry	0 - 1	
van de Glind, 2013	Pieter van de Glind	Like other studies, van	Pieter van de Glind
	investigated which	de Glind found a	gathered data through
	factors drive	significant relationship	twenty in-depth
	participation in	between social,	interviews and a
	collaborative	environmental, and	questionnaire among
	consumption for	financial motives on	1330 citizens of
	consumers living in	the willingness to take	Amsterdam
	Amsterdam.	part in SE. Besides,	
		recommendation from	
		relatives influences the	
		respondent's	
		willingness to take part	
		in SE significantly.	
		Additionally, different	
		demographics groups	
		showed varying	
		motives for taking part	
		in SE.	
Böcker and Meelen,	The study investigated	Data showed that	The study based their
2017	drivers of participation	drivers of participation	data on an online
	in SE by investigating	differ between socio-	survey held in 2013
	explicitly differences in	demographic groups,	among 1330 citizens of
	the role of provider	between users and	Amsterdam
	and user, differences	providers and between	
	between various socio-	different types of	
	demographic groups	sharing services. The	
	and differences across	accommodation	
	multiple sharing	sharing industry is	
		sharing maasa y is	

industries.	highly economically	
	motivated.	
	Furthermore,	
	providers seem to be	
	more motivated by	
	social and	
	environmental reasons	
	and users by economic	
	benefits.	

Appendix C – Survey

Dutch

Hartelijk welkom bij dit onderzoek. Mijn naam is Annoeska Banen en voor mijn Master in Marketing op de Erasmus Universiteit in Rotterdam doe ik onderzoek naar de Deeleconomie. Verdere uitleg hiervan volgt in de enquête.

Het invullen van de enquête duur zo'n 5 minuten en aan het einde van de enquête maakt u kans op een bol.com cadeuabon! Uw deelname is volledig anoniem en vrijwillig. Alle resultaten worden enkel gebruikt voor het onderzoek van mijn scriptie. Voor vragen of opmerkingen kunt u mailen naar: 509498ab@eur.nl

Alvast bedankt voor uw deelname!

Q1. Wat is uw huidige leeftijd?

Jonger dan 45
 45-54 jaar
 55-64 jaar
 65-74 jaar
 75-84 jaar

🔘 85 jaar of ouder

Q2. Deze enquête gaat over de 'Sharing Economy', in het Nederlands ook wel de Deeleconomie genoemd en afgekort door: SE. Om de verdere vragen te maken is het belangrijk dat u begrijpt wat de SE inhoudt. Leest u daarom alstublieft aandachtig de onderstaande onderwerpen door.

Wat is de Sharing Economy?

De SE is een economisch stelstel waarbij consumenten hun bezittingen of diensten ter beschikking stellen aan andere personen, al dan niet op een online platform. Hierbij gaat het om *onderbenutte capaciteit*, dit zijn producten die niet continu worden gebruikt, bijvoorbeeld een auto of een grasmaaier die niet constant nodig is. Een bekend voorbeeld van de sharing economy is Airbnb, waar consumenten hun huis of een gedeelte van hun huis verhuren aan andere consumenten.

Wat zijn voorbeelden van Sharing Economy platformen? Hieronder volgen een aantal andere voorbeelden van de SE.

<u>Ride sharing:</u> Blablacar koppelt mensen met dezelfde reisbestemming aan bestuurders van een auto met dezelfde bestemming, hierdoor worden autostoelen beter benut en delen consumenten de prijs van de rit. <u>Maaltijd sharing:</u> Bij Thuisafgehaald.nl kun je je gekookte maaltijd delen (tegen een meerprijs) met mensen uit jouw buurt

<u>Goederen sharing</u>: Peerby laat mensen uit de buurt hun producten met elkaar delen, gratis of voor een bepaalde prijs. Bijvoorbeeld een grasmaaier, bartafel of boormachine, die het meest van de tijd onbenut blijven

<u>Diensten</u>: Petbnb koppelt dieren bezitters met mensen die willen oppassen op hun huisdieren wanneer zij op vakantie of werk zijn.

Let op! De definitie van de SE in dit onderzoek gaat specifiek om *onderbenutte producten*. Marktplaats valt dus niet onder de SE, want dit betreft enkel de verkoop van producten en niet het delen van onderbenutte capaciteit. Daarnaast valt Uber niet onder SE, omdat Uber chauffeurs opgeleide taxi-chauffeurs zijn, terwijl in de SE iedereen kan deelnemen.

Ik heb het gelezen en begrijp wat de Deeleconomie inhoudt

Q3 Specificeer hieronder uw motivatie, waarom u wel zou willen deelnemen als een aanbieder in de SE. Let op! Het gaat hier dus om het <u>aanbieden</u> van uw producten/diensten en niet om het gebruiken van een SE dienst

Sterk mee Oneens Neutraal Mee eens Zeer mee eens oneens door het extra geld wat ik zou verdienen met het delen van mijn producten/diensten omdat ik financieel stabieler zou worden doordat het me in staat stelt een betekenisvollere interactie met mensen te hebben doordat het ervoor zorgt dat ik mensen uit de buurt leer kennen doordat het me in staat stelt om (nieuwe) relaties te ontwikkelen omdat ik zo de negatieve impact op het milieu kan

Ik zou gemotiveerd zijn om mijn producten/diensten aan te bieden op een SE platform.....

verminderen

omdat SE het gebruik van natuurlijke hulpbronnen kan verminderen

omdat delen een duurzamere manier van leven is

omdat SE mijn milieuvriendelijke gedrag laat zien

omdat het mij de mogelijkheid geeft om lid te worden van een community, met mensen met vergelijkbare intresses

omdat het me in staat stelt om deel uit te maken van een groep gelijkgestemde mensen

omdat delen op een SE platform mij leuk lijkt

omdat delen op een SE platform mij een opwindende ervaring lijkt

omdat delen op een SE platform mij interessant lijkt

omdat delen op een SE platform mijn nieuwsgierigheid zou bevredigen

want delen op een SE platform zou me plezier geven

	0	\bigcirc	\bigcirc	0	\bigcirc
r	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
	\bigcirc	\bigcirc	\bigcirc	\bigcirc	0
	0	\bigcirc	\bigcirc	0	0
j	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
j	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
j	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
	\bigcirc	\bigcirc	\bigcirc	0	\bigcirc
	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Q4 Specificeer hieronder nogmaals uw motivatie, nu waarom u **niet** zou willen deelnemen als een aanbieder in de SE. Let op! Het gaat hier weer specifiek om het <u>aanbieden</u> van uw producten/diensten op een SE platform.

	Sterk mee oneens	Oneens	Neutraal	Mee eens	Zeer mee eens
omdat ik me zorgen zou maken over mijn veiligheid	0	0	\bigcirc	0	\bigcirc
omdat ik bang zou zijn om het geld niet te ontvangen	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
omdat ik bang ben dat de communicatie misloopt tussen mij en de koper op het platform	0	\bigcirc	\bigcirc	0	\bigcirc
omdat ik verwacht dat de voordelen (bv. het geld) niet opwegen tegen de inspanning (bv. tijd en energie)	0	\bigcirc	\bigcirc	0	\bigcirc
omdat het mij niet genoeg extra inkomsten zou opleveren	0	0	\bigcirc	0	\bigcirc
omdat ik bezorgd zou zijn om mijn privacy op het platform	0	0	\bigcirc	0	\bigcirc
omdat ik de mensen niet zou vertrouwen die mijn producten/diensten willen gebruiken	0	0	\bigcirc	\bigcirc	\bigcirc

Ik zou gedemotiveerd zijn om mijn producten/diensten te delen op een SE platform....

Q5 Heeft u ooit gebruik gemaakt van SE pla	atformen, zo ja hoevaak?
--	--------------------------

○ Nooit
🔿 Ja, 1 keer
◯ Ja, in totaal ongeveer 2-5 keer
🔾 Ja, 1-4 keer per jaar
O Ja, 5-10 keer per jaar
🔿 Ja, meer dan 10 keer per jaar
Q6 Heeft u ooit zelf iets aangeboden op een sharing economy platform?
⊖ Ja
○ Nee

Q7 Zo ja, welke platformen heeft u gebruikt of iets op aangeboden?

Q8 Geef aan in hoeverre u het eens/oneens bent met de volgende stellingen

	Sterk mee oneens	Oneens	Neutraal	Mee eens	Zeer mee eens
Al met al, lijkt het mij een wijze stap om producten/diensten te delen op een SE platform	0	0	0	0	0
Over het algemeen vind ik de SE iets positiefs	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Al met al, denk ik dat het een goed idee is om deel te nemen aan de SE	0	\bigcirc	\bigcirc	0	\bigcirc
Ik zie mijzelf in de toekomst mijn producten/diensten delen op een SE platform. Of hiermee verdergaan indien u al een aanbieder bent	0	\bigcirc	\bigcirc	\bigcirc	0

Q9 Geef aan in hoeverre de volgende stellingen toepasselijk zijn op u

	Helemaal niet toepasselijk	Weinig toepasselijk	Geen van beide	Toepasselijk	Zeer toepasselijk
Ik voel me betrokken bij en bezorgd voor de welzijn van de toekomstige generatie	0	0	0	0	0
Ik vind het belangrijk om mijn kennis en vaardigheden over te dragen aan de jongere generatie	0	0	0	\bigcirc	0
lk beschouw mezelf als een anti-kapitalist	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
lk vertrouw onbekende mensen gemakkelijk	0	0	0	\bigcirc	0

Q10 Wat is uw geslacht?





Q11 Wat is uw netto (na belasting) maandinkomen?

O Minder dan €1.750

○ €1.750-€2.999

○ €3.000 of meer

O dat weet ik niet

O dat wil ik niet zeggen

Q12 Wat is uw huidige werksituatie?

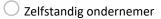
O Full-time werkend

O Part-time werkend

○ Gepensioneerd

O Gepensioneerd en actief in één van de volgende activiteiten: vrijwilligerswerk, zorgverlening, betaald/onbetaald werk

O Werkeloos



• Arbeidsongeschikt

O dat wil ik niet zeggen

Q13 Wat is uw hoogst behaalde diploma?

◯ Geen

O Middelbare school

O mbo diploma

🔘 hbo diploma

O Master diploma

O Doctor diploma

Q14 Hartelijk dank voor uw deelname! Indien u wil kansmaken op een bol.com cadeaubon, vul dan hieronder uw e-mail adres in

O Nee bedankt

O Ja, graag _____

English

Welcome to this research. My name is Annoeska Banen and to obtain my Master's degree in Marketing at the Erasmus University in Rotterdam I investigate the sharing economy. Further explanation of this will follow in the survey.

Completing the survey will take approximately five minutes and at the end of the survey you have a chance of winning a bol.com gift voucher! Your participation in this study is completely anonymous and voluntary. All results are used solely for the research of my thesis. If you have any questions or remarks, please send an e-mail to: 509498ab@eur.nl

Thank you for your participation!

Q1. What is your current age?

Younger than 45
45-54
55-64
65-74
75-84
85 years or older

Q2. This survey concerns the 'Sharing Economy', which is abbreviated by: SE. In order to fill in the following questions, it is important to understand the concept of the SE. Please read the following topics carefully

What is the Sharing Economy?

The SE is economic system in which consumers offer their own products/services to other consumers, whether or not on an online platform. This concerns under-used capacity, i.e., products that are not in continuous use, such as a car or a lawnmower that are not constantly used. A well-known example of the SE is Airbnb, a platform where consumers offer their house or a part of their house to other consumers.

What are examples of the sharing economy? Below are several examples of the SE.

<u>Ride sharing</u>: Blablacar.com matches people with the same destination with drivers who own a car and have the same destination

<u>Meal sharing</u>: At Thuisafgehaald.nl people can share their cooked meal (for an surcharge) with people from the neighborhood

<u>Product sharing</u>: With Peerby, people can share their products with people from the neighborhood, for free or a specific price. For example a lawnmower, bar table or drill, which are most of the time unused.

<u>Service sharing</u>: Petbnb connects pet owners with people who want to take care of their pets when they are at work or on holiday.

Attention! The definition of the SE in this study is specifically about under-used products. Marktplaats does not belong to the SE, as it concerns merely the sale of products and does not concern sharing under-used capacity. Furthermore, Uber does not belong to the SE, since Uber drivers are educated taxi drivers, whereas in principal everyone can join the SE to offer products/services.

I read it and understand the meaning and concept of the sharing economy

Q3 Please specify your motivation, why you would be willing to participate as a provider in the SE. Attention! The question is specifically about offering your products/services on a SE platform, and not about using the SE service.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
by the extra money I'd make with sharing my products/services	0	0	0	0	0
because I'd make me more financially stable	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
it allows me to have a more meaningful interaction with people	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc
it allows me to get to know people from the local neighborhoods	0	0	0	\bigcirc	0
it allows me to develop social relationships	0	0	\bigcirc	\bigcirc	\bigcirc
because it allows me to reduce the negative impact on the environment	\bigcirc	\bigcirc	0	\bigcirc	\bigcirc

I would be motivated to share my products/services on a SE platform...

because use of the SE reduces the use of natural resources	0	0	\bigcirc	0	0
because sharing is a more sustainable way of living	0	\bigcirc	\bigcirc	\bigcirc	0
because it reflects my environmentally friendly	0	\bigcirc	\bigcirc	0	0
because it allows me to be part of a group of like- minded people	0	\bigcirc	\bigcirc	\bigcirc	0
because it allows me to belong to a group of people with similar interests	0	\bigcirc	\bigcirc	\bigcirc	0
because sharing on a SE platform seems fun	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
because sharing seems like an exciting experience to me	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
because sharing on a SE platforms seems interesting	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
because sharing on a SE platform would satisfy my curiosity	0	\bigcirc	\bigcirc	\bigcirc	0
because sharing on a SE platform would give me pleasure	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Q4 Please specify again your motivation, but now why you don't want to participate as a provider in the SE. Attention! The question is again specifically about offering your products/services on a SE platform.

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
because I would be concerned about my safety	0	0	0	0	0
because I would be afraid of not receiving the money	0	\bigcirc	0	0	0
because I'm concerned that the communication between me and the buyer will go wrong	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
because I expect that the benefits (e.g., the money) do not outweigh the effort (e.g., time and energy)	0	\bigcirc	0	0	\bigcirc
because it wouldn't provide me sufficient extra income	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
because I would be concerned about my privacy on the platform	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
because I wouldn't trust the people who want to use my products/services	0	\bigcirc	0	0	0

Q5 Have you ever used SE platforms, if yes how many times?
○ Never
O Yes, once
O Yes, around 2-5 times
• Yes, 1-4 times a year
O Yes, 5-10 times a year
• Yes, more than 10 times a year
Q6 Have you ever shared something on a sharing economy platform?
⊖ _{Yes}
Νο

Q7 If you have answered yes, which platforms did you use to offer your products/services ?

Q8 Please indicate to what extent you agree or disagree with the following statements

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Overall, I think it is a wise move to share products/services on a SE platform	0	0	0	0	0
All-in all, I think the sharing economy is a positive thing	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc
All-in all, I think it is makes sense to share on sharing economy platforms	0	\bigcirc	\bigcirc	0	\bigcirc
I can see myself sharing my products/services on sharing economy platforms in the future, or continue sharing	0	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Q9 Please indicate to what extent the following statements are applicable to you

	Not applicable at all	Inapplicable	Neutral	Applicable	Highly applicable
I feel engaged and concerned about the well- being of the future generation	0	0	0	0	0
I believe it is important to pass on my knowledge and skills to the younger generation	0	0	0	0	\bigcirc

Q10 What is your gender?

○ Woman

 \bigcirc Man

Q11 What is your net monthly income?

O Less than €1.750

○ €1.750-€2.999

○ €3.000 or more

🔘 I don't know

O I'd rather not say

Q12 What is your current employment situation?

O Full-time employee
O Part-time employee
Retired
\bigcirc Retired and active in one of the following activities: volunteering, caregiving, paid/unpaid work
O Entrepreneur
O Disabled to work
O I'd rather not say
Q13 What is the highest degree or level of school you have completed?
○ None
O High school (in Dutch: Middelbare school)
O Secondary vocational education (in Dutch: mbo diploma)
O Bachelor's degree
O Master's degree
O Doctorate
Q14 Thank you for your participation! If you want to win a bol.com gift voucher please enter your e-mail
O No thanks

O Yes, please ______

Appendix D – Table variables and measurements

Variable	Statements in English and Dutch	Source	Used items of source
	Please indicate to what extent you agree/disagree with the following statements Geef aan in hoeverre u het eens/oneens bent met de volgende stellingen		
Attitude ATT_1	- Overall, I think it is a wise move to share products/services on a SE platform AI met al, lijkt het mij een wijze stap om producten/diensten te delen op een SE platform	Sung, Kim and Lee, 2018	 Overall, I think it is a wise move to join Airbnb All in all, I think Airbnb is a positive thing All in all, I think it is a good idea to join Airbnb Overall, I think it makes sense to share accommodation services on
ATT_2	- All-in all, I think the sharing economy is a positive thing Over het algemeen vind ik de SE iets positiefs		Airbnb
ATT_3	- All-in all, I think it is makes sense to share on sharing economy platforms Al met al, denk ik dat het een goed idee is om deel te nemen aan de SE		
Behavioral intention INT1	I can see myself sharing my products/services on sharing economy platforms in the future Ik zie mijzelf in de toekomst mijn producten/diensten delen op een SE platform. Of hiermee verdergaan indien u al een aanbieder bent	Tussyadiah, 2016b	 I expect to continue using P2P accommodation in the future I can see myself using P2P accommodation in the future It is likely that I will use P2P accommodation in the future
	I would be motivated to share my products/services on SE platforms Ik zou gemotiveerd zijn om mijn producten/diensten aan te bieden op een SE platform		
Economic ECO_1	- by the extra money I'd make with sharing my products/services door het extra geld wat ik zou	Tussyadiah, 2016b	 Staying at a P2P accommodation saves me money Staying at a P2P accommodation benefits me

	wordlange wat hat date as		finencially
	verdienen met het delen van mijn producten/diensten		financially
ECO_2	- because I'd make me more		
100_2	financially stable		
	omdat ik financieel stabieler zou		
	worden		
Social		Tussyadiah, 2016b	Staying at a P2P
SOC_1	- it allows me to have a more	1000 y 001011) 20200	accommodation
	meaningful interaction with		allows me to get insider
	people		tips on local attractions
	doordat het me in stelt staat		allows me to have a more
	een betekenisvollere interactie		meaningful interaction with
	met mensen te hebben		locals
SOC_2	- it allows me to get to know		allows me to get to know
_	people from the local		people from the local
	neighborhoods		neighborhoods
	doordat het ervoor zorgt dat ik		allows me to develop
	mensen uit de buurt leer kennen		social relationships
SOC_3	 it allows me to develop social 		helps me connect with
	relationships		locals
	doordat het me in staat stelt om		
	(nieuwe) relaties te ontwikkelen		
Environmental		- Lamberton and	- By using SE, I reduce the
ENV_1	- because it allows me to reduce	Rose, 2012;	use of natural resources
	the negative impact on the	Möhlmann, 2015	- With the use of [CCS], I
	environment		demonstrate environmental
	omdat ik zo de negatieve		friendly consumption behavior
	impact op het milieu kan verminderen		benavior
ENV_2	- because use of the SE reduces	- Tussyadiah,	Staying at a P2P
	the use of natural resources	2016b	accommodation
	omdat SE het gebruik van	20100	is a more sustainable way
	natuurlijke hulpbronnen kan		of travel
	verminderen		helps reduce the negative
ENV_3	- because sharing is a more		impacts of travel on the
_	sustainable way of living		environment
	omdat delen een duurzamere		helps reduce the
	manier van leven is		consumption of energy and
ENV_4	- because it reflects my		other resources while
	environmentally friendly		traveling
	behavior		allows me to a more
	omdat SE mijn		socially responsible traveler
	milieuvriendelijke		
	consumentengedrag laat zien		
Community		- Lamberton and	- The use of [CCS] allows me
Belonging	- because it allows me to be	Rose, 2012;	to be part of a group of like-
COM_1	part of a group of like-minded	Möhlmann, 2015	minded people
	people		- The use of [CCS] allows me
	omdat het mij de mogelijkheid		to belong to a group of

			1
	geeft om lid te worden van een		people with similar interests
	community met mensen met		
	vergelijkbare interesses		
COM_2	- because it allows me to belong		
_	to a group of people with		
	similar interests		
	omdat het me in staat stelt om		
	deel uit te maken van een groep		
	gelijkgestemde mensen		
Enjoyment of	genjkgestennde mensen	Sung Kim and Loo	- Airbnb accommodation is
Enjoyment of		Sung, Kim and Lee, 2018	fun
sharing	hereing on a CC	2018	
ENJ_1	- because sharing on a SE		- Airbnb accommodation is
	platform seems fun		exciting
	omdat delen op een SE platform		- Airbnb accommodation is
	mij leuk lijkt		interesting
ENJ_2	- because sharing seems like an		- Airbnb accommodation
	exciting experience to me		satisfies your curiosity
	omdat delen op een SE platform		- Airbnb accommodation
	mij opwindende ervaring lijkt		gives me pleasure
ENJ_3	- because sharing on a SE		
	platforms seems interesting		
	omdat delen op een SE platform		
	mij interessant lijkt		
ENJ_4	- because sharing on a SE		
	platform would satisfy my		
	curiosity		
	omdat delen op een SE platform		
	mijn nieuwsgierigheid zou		
	bevredigen		
	-		
ENJ_5	- because sharing on a SE		
	platform would give me		
	pleasure		
	want delen op een SE platform		
	zou me plezier geven		
	I would be demotivated to		
	share my product/services on a		
	SE platform		
	Ik zou gedemotiveerd zijn om		
	producten/diensten te delen op		
	een SE platform		
Process risks		Hawlitschek et al.,	No items/statements have
concerns		2018	been published
PRO_1	- because I would be concerned	- Tussyadiah, 2015	
	about my safety		I was concerned about
	omdat ik me zorgen zou maken	- Tussyadiah, 2015	safety
	over mijn veiligheid		I did not trust the online
PRO_2	- because I would be afraid of	- Hawlitschek et al.,	platform to execute the
_	not receiving the money	2018	transaction
	omdat ik bang zou zijn om het		
	geld niet te ontvangen		
PRO_3	- because I'm concerned that		
FNO_3			

[
	the communication between		
	me and the buyer will go wrong		
	omdat ik bang ben dat de		
	communicatie misloopt tussen		
	mij en de koper op het platform		
Expected		- Tussyadiah, 2015	it did non save me enough
effort			money
EFF_1	- because I expect that the		
	benefits (e.g., the money) do	- Hawlitschek et al.,	 No items/statements have
	not outweigh the effort (e.g.,	2018	been published
	time and energy)		
	omdat ik verwacht dat de		
	voordelen (bv. het geld) niet		
	opwegen tegen de inspanning		
	(bv. tijd en energie)		
EFF_2	- because it wouldn't provide		
	me sufficient extra income		
	omdat het mij niet genoeg extra		
	inkomsten zou opleveren		
Trust in		- Tussyadiah, 2015	I was concerned about
user/platform		- Möhlmann, 2015	privacy
TRU_1	- because I would be concerned	Wommann, 2015	- CCS provides a robust and
110_1	about my privacy on the	- Hawlitschek et al.,	safe environment in which I
	platform	2018	can use the service
	omdat ik bezorgd zou zijn om	2018	- Overall, CCS is trustworthy
	mijn privacy op het platform		
TRU_2	- because I wouldn't trust the		- No validated statements of
	people who want to use my products/services		Hawlitschek et al. (2018)
	omdat ik de mensen niet zou		
	vertrouwen die mijn		
	producten/diensten willen		
	gebruiken		
	Please indicate to what extent		
	the following statements apply		
	to you Goof gap in booyarra da		
	Geef aan in hoeverre de		
	volgende stellingen toepasselijk		
Concretivity	zijn op u	Mor Darak 1005	Evaluation of the
Generativity		- Mor-Barak, 1995	Explanation of the
GEN_1	- I feel engaged and concerned		generativity factor
	about the well-being of the		- Allows me to pass my
	future generation		knowledge to the next
	lk voel me betrokken bij en		generation
	bezorgd voor de welzijn van de		- Gives me an opportunity to
	toekomstige generatie		share my skills with younger
GEN_2	- I believe it is important to pass		people
	on my knowledge and skills to		
	the younger generation		
	lk vind het belangrijk om mijn		

kennis en vaardigheden over te	
dragen aan de jongere 	
generatie	

Appendix E – Factor analysis output driver items

Table E1: Correlation matrix driver items

Correlation Matrix Drivers 1

		ECO_1	ECO_2	SOC_1	SOC_2	SOC_3	ENV_1
Correlation	ECO_1	1,000	,562	,235	,082	,096	,245
	ECO_2	,562	1,000	,273	,219	,187	,098
	SOC_1	,235	,273	1,000	,476	,400	,204
	SOC_2	,082	,219	,476	1,000	,559	,168
	SOC_3	,096	,187	,400	,559	1,000	,040
	ENV_1	,245	,098	,204	,168	,040	1,000
	ENV_2	,188	,107	,152	,061	,029	,697
	ENV_3	,129	,058	,247	,093	-,006	,540
	ENV_4	,146	,053	,275	,240	,068	,220
	COM_1	,120	,201	,270	,341	,623	,092
	COM_2	,227	,348	,386	,215	,253	,203
	ENJ_1	,231	,207	,225	,296	,484	,126
	ENJ_2	,333	,327	,442	,399	,407	,196
	ENJ_3	,180	,264	,155	,339	,397	,068
	ENJ_4	,256	,429	,228	,276	,259	,046
	ENJ_5	,264	,304	,437	,338	,326	,154
	GEN_1	,171	,201	,239	,160	,197	,184
	GEN_2	,024	,101	,226	,192	,137	,051

Correlation Matrix Drivers 2

ENV_2	ENV_3	ENV_4	COM_1	COM_2	ENJ_1
-------	-------	-------	-------	-------	-------

Correlation	ECO_1	,188	,129	,146	,120	,227	,231
	ECO_2	,107	,058	,053	,201	,348	,207
	SOC_1	,152	,247	,275	,270	,386	,225
	SOC_2	,061	,093	,240	,341	,215	,296
	SOC_3	,029	-,006	,068	,623	,253	,484
	ENV_1	,697	,540	,220	,092	,203	,126
	ENV_2	1,000	,607	,227	,043	,100	,006
	ENV_3	,607	1,000	,464	,076	,111	,097
	ENV_4	,227	,464	1,000	,176	,085	,163
	COM_1	,043	,076	,176	1,000	,248	,671
	COM_2	,100	,111	,085	,248	1,000	,312
	ENJ_1	,006	,097	,163	,671	,312	1,000
	ENJ_2	,148	,203	,186	,418	,663	,444
	ENJ_3	-,039	,007	,290	,434	,352	,501
	ENJ_4	,041	,038	,305	,284	,453	,363
	ENJ_5	,046	,218	,274	,260	,622	,492
	GEN_1	,217	,160	,146	,123	,061	,134
	GEN_2	,208	,075	,069	,043	-,045	-,009

Correlation Matrix Drivers 3

		ENJ_2	ENJ_3	ENJ_4	ENJ_5	GEN_1	GEN_2
Correlation	ECO_1	,333	,180	,256	,264	,171	,024
	ECO_2	,327	,264	,429	,304	,201	,101
	SOC_1	,442	,155	,228	,437	,239	,226
	SOC_2	,399	,339	,276	,338	,160	,192
	SOC_3	,407	,397	,259	,326	,197	,137

ENV_1	,196	,068	,046	,154	,184	,051
ENV_2	,148	-,039	,041	,046	,217	,208
ENV_3	,203	,007	,038	,218	,160	,075
ENV_4	,186	,290	,305	,274	,146	,069
COM_1	,418	,434	,284	,260	,123	,043
COM_2	,663	,352	,453	,622	,061	-,045
ENJ_1	,444	,501	,363	,492	,134	-,009
ENJ_2	1,000	,558	,457	,623	,205	,185
ENJ_3	,558	1,000	,655	,485	,056	,100
ENJ_4	,457	,655	1,000	,526	,074	-,048
ENJ_5	,623	,485	,526	1,000	,199	,080,
GEN_1	,205	,056	,074	,199	1,000	,436
GEN_2	,185	,100	-,048	,080	,436	1,000

Table E2: KMO and Bartlett's Test drivers

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Me	,771	
Bartlett's Test of Sphericity	Approx. Chi-Square	1182,923
	df	153
	Sig.	,000

Table: E3: Communalities driver factors

Communalities

	Initial	Extraction				
ECO_1	1,000	,719				
ECO_2	1,000	,726				
SOC_1	1,000	,633				
SOC_2	1,000	,550				
SOC_3	1,000	,765				
ENV_1	1,000	,752				
ENV_2	1,000	,769				
ENV_3	1,000	,751				
ENV_4	1,000	,746				
COM_1	1,000	,803				
COM_2	1,000	,790				
ENJ_1	1,000	,712				
ENJ_2	1,000	,706				
ENJ_3	1,000	,734				
ENJ_4	1,000	,732				
ENJ_5	1,000	,714				
GEN_1	1,000	,611				
GEN_2	1,000	,708				
Extraction	Extraction Method: Principal					

Extraction Method: Principal Component Analysis.

Table E4: Total Variance Explained & Rotated Component Matrix driver items

		Initial Eigenvalu	ies	Extractio	n Sums of Squar	ed Loadings	Rotatio	n Sums of Square	ed Loadings
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5,905	32,807	32,807	5,905	32,807	32,807	3,461	19,227	19,227
2	2,298	12,765	45,572	2,298	12,765	45,572	2,681	14,892	34,119
3	1,525	8,471	54,043	1,525	8,471	54,043	2,638	14,653	48,771
4	1,363	7,570	61,613	1,363	7,570	61,613	1,725	9,584	58,355
5	1,047	5,819	67,432	1,047	5,819	67,432	1,634	9,077	67,432
6	,982	5,455	72,886						
7	,864	4,801	77,687						
8	,707	3,928	81,615						
9	,566	3,146	84,761						
10	,486	2,702	87,463						
11	,418	2,321	89,784						
12	,389	2,162	91,946						
13	,347	1,927	93,872						
14	,304	1,689	95,562						
15	,266	1,477	97,039						
16	,196	1,090	98,129						
17	,193	1,070	99,199						
18	,144	,801	100,000						

Total Variance Explained

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

			Component		
	1	2	3	4	5
ENJ_5	,784				
ENJ_4	,780				
COM_2	,694				
ENJ_3	,687	,390			
ENJ_2	,672	,337			
COM_1		,866			
SOC_3		,817			
ENJ_1	,336	,731			
SOC_2	,341	,519		,356	
ENV_2			,847		
ENV_3			,842		
ENV_1			,832		
ENV_4	,456		,528		
GEN_2				,840	
GEN_1				,728	
SOC_1	,400			,417	
ECO_1					,795
ECO_2	,319				,769

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Table E5: Variance explained and Rotated Component Matrix for six components

						-				
	Initial Eigenvalues			Extractio	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
1	5,905	32,807	32,807	5,905	32,807	32,807	2,673	14,852	14,852	
2	2,298	12,765	45,572	2,298	12,765	45,572	2,614	14,523	29,376	
3	1,525	8,471	54,043	1,525	8,471	54,043	2,563	14,238	43,614	
4	1,363	7,570	61,613	1,363	7,570	61,613	1,930	10,722	54,336	
5	1,047	5,819	67,432	1,047	5,819	67,432	1,736	9,646	63,982	
6	,982	5,455	72,886	,982	5,455	72,886	1,603	8,904	72,886	
7	,864	4,801	77,687							
8	,707	3,928	81,615							
9	,566	3,146	84,761							
10	,486	2,702	87,463							
11	,418	2,321	89,784							
12	,389	2,162	91,946							
13	,347	1,927	93,872							
14	,304	1,689	95,562							
15	,266	1,477	97,039							
16	,196	1,090	98,129							
17	,193	1,070	99,199							
18	,144	,801	100,000							

Total Variance Explained

Extraction Method: Principal Component Analysis.

Rotated Component Matrix^a

			Comp	onent		
	1	2	3	4	5	6
COM_2	,806					
ENJ_5	,687			,433		
ENJ_2	,675	,314				
SOC_1	,672					
COM_1		,870				
SOC_3	,313	,803				
ENJ_1		,736		,312		
SOC_2	,463	,497				
ENV_2			,852			
ENV_1			,832			
ENV_3			,831			
ENJ_3		,403		,720		
ENJ_4	,348			,708	,311	
ENV_4			,502	,643		
ECO_1					,816	
ECO_2					,794	
GEN_2						,848,
GEN_1						,755

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Table E6: Rotated Component Matrix excluding COM_1 and COM_2

			Component		
	1	2	3	4	5
ECO_1				,827	
ECO_2				,818,	
SOC_1			,628		
SOC_2			,775		
SOC_3			,834		
ENV_1		,822			
ENV_2		,842			
ENV_3		,846			
ENV_4	,537	,544			
ENJ_1	,510		,482		
ENJ_2	,548		,456		
ENJ_3	,827				
ENJ_4	,806				
ENJ_5	,653		,351		
GEN_1					,788
GEN_2					,855

Rotated Component Matrix^a

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Appendix F – Factor analysis output barrier items

Table F1: Correlation matrix barrier items

		PRO_1	PRO_2	PRO_3	TRU_1	TRU_2	EFF_1	EFF_2
Correlation	PRO_1	1,000	,513	,315	,581	,384	,227	,128
	PRO_2	,513	1,000	,568	,475	,442	,353	,253
	PRO_3	,315	,568	1,000	,408	,462	,377	,364
	TRU_1	,581	,475	,408	1,000	,538	,236	,292
	TRU_2	,384	,442	,462	,538	1,000	,419	,321
	EFF_1	,227	,353	,377	,236	,419	1,000	,321
	EFF_2	,128	,253	,364	,292	,321	,321	1,000

Correlation Matrix

Table F2: KMO and Bartlett's Test barrier factors

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Me	,809	
Bartlett's Test of	Approx. Chi-Square	288,548
Sphericity	df	21
	Sig.	,000

Table F3: Communalities barrier variables

Communalities

Initial	Extraction
1,000	,752
1,000	,618
1,000	,577
1,000	,682
1,000	,571
1,000	,555
1,000	,606
	1,000 1,000 1,000 1,000 1,000 1,000

Extraction Method: Principal Component Analysis.

Table F4: Total Variance Explained barrier variables

Total Variance Explained Initial Eigenvalues Extraction Sums of Squared Loadings Rotation Sums of Squared Loadings Total % of Variance Cumulative % Total % of Variance Cumulative % Total % of Variance Cumulative % Component 1 3,324 47,489 47,489 3,324 47,489 47,489 2,426 34,660 34,660 2 1,037 14,818 62,308 1,037 14,818 62,308 1,935 27,648 62,308 3 72,541 ,716 10,233 81,904 4 .655 9,363 5 .551 7,865 89,769 6 .378 5,405 95,174 7 ,338 4,826 100,000

Extraction Method: Principal Component Analysis.

Table F5: Rotated Component Matrix barrier variables

Rotated Component Matrix ^a									
Component									
	1	2							
PRO_1	,867								
PRO_2	,699	,359							
PRO_3	,457	,607							
TRU_1	,799								
TRU_2	,556	,512							
EFF_1		,726							
EFF 2		,778							

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

 a. Rotation converged in 3 iterations.

Table F6: Total Variance explained demanding for 3 components

Total Variance Explained

	Initial Eigenvalues		Extractio	Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3,323	47,474	47,474	3,323	47,474	47,474	2,048	29,255	29,255
2	1,015	14,505	61,979	1,015	14,505	61,979	1,779	25,412	54,667
3	,694	9,909	71,888	,694	9,909	71,888	1,205	17,221	71,888
4	,668	9,549	81,437						
5	,581	8,295	89,732						
6	,376	5,368	95,100						
7	,343	4,900	100,000						

Extraction Method: Principal Component Analysis.

Table F7: Rotated Component Matrix while demanding for 3 components

Rotated Component Matrix^a

	Component						
	1	2	3				
TRU_1	,868,						
PRO_1	,777	,307					
TRU_2	,584		,448				
EFF_1		,728	,359				
PRO_3		,725					
PRO_2	,509	,709					
EFF_2			,861				

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

Table F8: Statistics barrier items

Descriptive Statistics

	Mean	Std. Deviation	Analysis N
PRO_1	2,89	,961	139
PRO_2	3,30	1,081	139
PRO_3	3,09	,884	139
TRU_1	2,80	,926	139
TRU_2	2,86	,903	139
EFF_1	3,20	1,009	139
EFF_2	2,65	,884	139

Table F9: Cronbach's Alpha EFF_1 and EFF_2

Reliability Statistics

Cronbach's Standardized
Alpha Based on

Table F10: Cronbach's alpha construct Negative suspicion

Reliability Statistics

Cronbach's Alpha	N of Items
,739	3

Item-Total Statistics					
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	
PRO_1	5,66	2,573	,526	,700	
TRU 1	5,76	2,375	,661	.536	

2,766

,512

,700 ,536

,712

Table F11: Cronbach's Alpha EFF_1, PRO_2 and PRO_3

5,69

Reliability Statistics

TRU_2

Cronbach's Alpha	N of Items
,702	3

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EFF_1	6,40	3,052	,427	,722
PRO_2	6,29	2,499	,558	,561
PRO_3	6,50	2,991	,590	,538

Appendix G - Factor analysis dependent variable

Table G1: Correlation Matrix, KMO and Bartlett's Test and Communalities for attitude

Correlation Matrix

		ATT_1	ATT_2	ATT_3
Correlation	ATT_1	1,000	,610	,701
	ATT_2	,610	1,000	,576
	ATT_3	,701	,576	1,000

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,711
Bartlett's Test of Sphericity	Approx. Chi-Square	165,109
	df	3
	Sig.	,000

Communalities

	Initial	Extraction
ATT_1	1,000	,795
ATT_2	1,000	,694
ATT_3	1,000	,770
Extraction	Mothod: D	rineinel

Extraction Method: Principal Component Analysis.

Table G2: Total Variance Explained and Component matrix for attitude items

Total Variance Explained

		Initial Eigenvalues			n Sums of Square	ed Loadings
Component Total % of Variance Cumulative %		% of Variance Cumulative % Total % of Va		% of Variance	Cumulative %	
1	2,259	75,311	75,311	2,259	75,311	75,311
2	,444	14,816	90,127			
3	,296	9,873	100,000			
Extraction Method: Dringing Component Applying						

Extraction Method: Principal Component Analysis.

Component . Matrix^a

Component

	1	
ATT_1	,892	
ATT_3	,877	
ATT_2	,833	
Extraction Method: Principal Component Analysis.		
a. 1 components extracted.		

Table G3: Reliability analysis for attitude

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.833	.836	

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
ATT_1	7,38	1,556	,743	,555	,718
ATT_2	7,12	2,117	,643	,415	,824
ATT_3	7,49	1,614	,719	,526	,743

Appendix H – Reliability analysis driver constructs

Table H1: Cronbach's Alpha Economic construct

Reliability Statistics

Cronbach's Alpha N of Items ,727 2

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ECO_1	2,54	1,004	,572	
ECO_2	3,06	1,104	,572	

Table H2: Reliability analysis Community belonging construct

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,444	,444	2

Inter-Item Correlation Matrix

	COM_2	COM_1
COM_2	1,000	,285
COM_1	,285	1,000

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
COM_2	2,90	,801	,285	,081	
COM_1	3,24	,791	,285	,081	

Table H3: Cronbach's Alpha Environmental component

Reliability Statistics

Cronbach's Alpha	N of Items
,797	4

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ENV_1	10,99	3,753	,657	,721
ENV_2	11,09	3,775	,690	,704
ENV_3	10,85	4,042	,710	,703
ENV_4	11,39	4,457	,411	,842

Table H4: Cronbach's Alpha Social component

Reliability Statistics

Cronbach's Alpha	N of Items
,754	3

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SOC_1	6,46	2,294	,527	,735
SOC_2	6,52	2,020	,644	,599
SOC_3	6,88	2,210	,582	,674

Table H5: Cronbach's Alpha Enjoyment component

Reliability Statistics

Cronbach's Alpha	N of Items
,846	5

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ENJ_1	11,63	8,988	,573	,836
ENJ_2	11,40	8,458	,676	,809
ENJ_3	12,06	8,728	,699	,805
ENJ_4	11,86	8,515	,638	,819
ENJ_5	11,55	8,089	,691	,805

Item-Total Statistics

Table H6: Cronbach's Alpha Generativity component

Reliability Statistics

Cronbach's Alpha	N of Items
,591	2

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
GEN_1	3,88	,514	,432	
GEN_2	3,94	,316	,432	

.

.

Appendix I – Overview of assumptions output

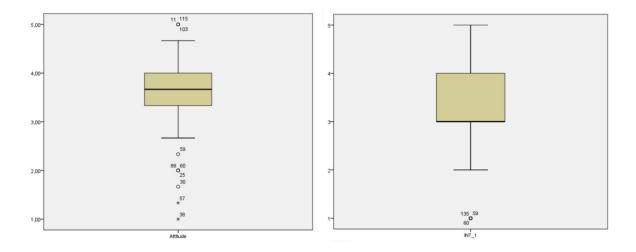


Figure I1: Boxplot attitude (left) and intention (right)

Figure I2: P-P plot

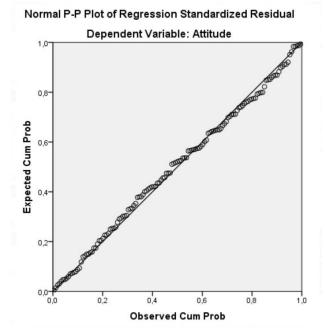


Figure I3: Scatterplot

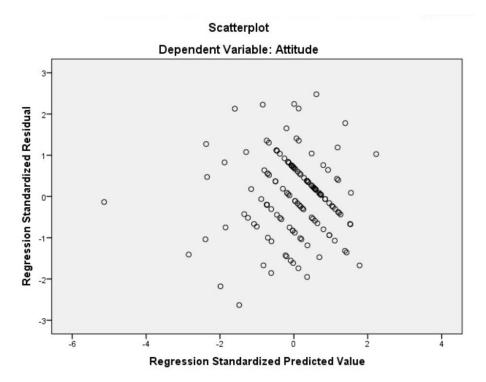
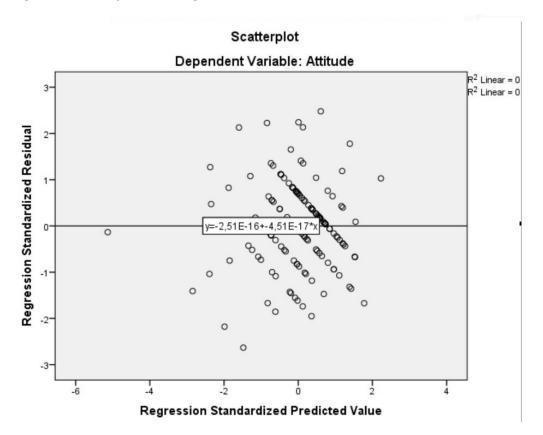
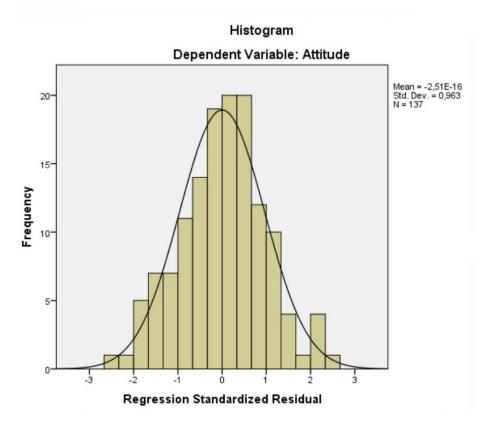


Figure I4: Scatterplot including a linear line







Appendix J – Output Multiple linear regression analysis

		Attitude	Economic	Social	Environmental
Pearson Correlation	Attitude	1,000	,325	,432	,469
	Economic	,325	1,000	,253	,184
	Social	,432	,253	1,000	,157
	Environmental	,469	,184	,157	1,000
	Enjoyment	,359	,407	,530	,136
	Generativity	,260	,155	,278	,198
	Community belonging	,301	,324	,351	,162
	Expected effort	-,176	-,008	-,189	-,105
	Not enough gain	-,276	,183	-,249	-,135
	Process_risks	-,354	-,161	-,340	-,080
	Negative_suspections	-,269	,05 1	-,144	-,068

Correlations

Table J1: Correlations predictors and outcome variable

Correlations

				Community
		Enjoyment	Generativity	belonging
Pearson Correlation	Attitude	,359	,260	,301
	Economic	,407	,155	,324
	Social	,530	,278	,351
	Environmental	,136	,198	,162
	Enjoyment	1,000	,141	,621
	Generativity	,141	1,000	,002
	Community belonging	,621	,002	1,000
	Expected effort	-,111	-,125	-,115
	Not enough gain	,075	-,048	,046
	Process_risks	-,233	-,114	-,118
	Negative_suspections	-,042	-,188	-,038

Correlations

		Expected effort	Not enough gain	Process risks
Pearson Correlation	Attitude	-,176	-,276	-,354
	Economic	-,008	,183	-,161
	Social	-,189	-,249	-,340
	Environmental	-,105	-,135	-,080
	Enjoyment	-,111	,075	-,233
	Generativity	-,125	-,048	-,114
	Community belonging	-,115	,046	-,118
	Expected effort	1,000	,321	,411
	Not enough gain	,321	1,000	,341
	Process_risks	,411	,341	1,000
	Negative_suspections	,358	,301	,607

Correlations

		Negative suspections
Pearson Correlation	Attitude	-,269
	Economic	,051
	Social	-,144
	Environmental	-,068
	Enjoyment	-,042
	Generativity	-,188
	Community belonging	-,038
	Expected effort	,358
	Not enough gain	,301
	Process_risks	,607
	Negative_suspections	1,000

Table J2: Model Summary and ANOVA (below)

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate					
1	,699 ^a	,489	,428	,42685					

a. Predictors: (Constant), Older, Environmental, Expected effort, Provider, Enjoyment, Generativity, Woman, Not enough gain, Negative_suspections, Economic, Social, Community belonging, Process_risks, Retired

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20,716	14	1,480	8,122	,000 ^b
	Residual	21,682	119	,182		
	Total	42,398	133			

a. Dependent Variable: Attitude

b. Predictors: (Constant), Older, Environmental, Expected effort, Provider, Enjoyment, Generativity, Woman, Not enough gain, Negative_suspections, Economic, Social, Community belonging, Process_risks, Retired

Table J3: Coefficients table

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1,870	,433		4,316	,000
	Economic	,119	,050	,191	2,394	,018
	Social	,112	,073	,134	1,528	,129
	Environmental	,274	,061	,317	4,482	,000,
	Enjoyment	,090	,079	,113	1,140	,257
	Generativity	,078	,074	,076	1,059	,292
	Community belonging	,042	,056	,065	,747	,457
	Expected effort	,024	,043	,044	,574	,567
	Not enough gain	-,134	,052	-,205	-2,556	,012
	Process_risks	-,040	,063	-,062	-,637	,525
	Negative_suspections	-,102	,067	-,138	-1,524	,130
	Woman	,110	,081	,097	1,371	,173
	Provider	,147	,155	,066	,948	,345
	Retired	-,216	,161	-,164	-1,339	,183
	Older	,212	,169	,153	1,254	,212

a. Dependent Variable: Attitude

Appendix K - Output linear regression intrinsic and extrinsic motivation

Table K1: Multiple linear regression intrinsic motivations on attitude

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	17,194	5	3,439	17,192	,000 ^b
	Residual	26,203	131	,200		
	Total	43,397	136			

a. Dependent Variable: Attitude

b. Predictors: (Constant), Generativity, Community_belonging, Environmental, Enjoyment, Social

Model Summary^b

					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	,629 ^a	,396	,373	,44724	,396	17,192	5	131	,000

a. Predictors: (Constant), Generativity, Community_belonging, Environmental, Enjoyment, Social

b. Dependent Variable: Attitude

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1,006	,349		2,882	,005
	Social	,275	,074	,326	3,730	,000
	Environmental	,334	,060	,387	5,547	,000
	Enjoyment	,175	,069	,217	2,535	,012
	Community_belonging	-,116	,054	-,181	-2,144	,034
	Generativity	,082	,074	,079	1,104	,272

a. Dependent Variable: Attitude

Table K2: Multiple linear regression of extrinsic motivation and enjoyment on intention

	Model Summary									
						Cha	inge Statistic	s		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	,481 ^a	,232	,220	,788	,232	20,201	2	134	,000,	
a Pro	a Predictore: (Constant) Enjoyment Economic									

Model Summary^b

a. Predictors: (Constant), Enjoyment, Economic

b. Dependent Variable: Intention

	ANOVA ^a									
Model		Sum of Squares	df	Mean Square	F	Sig.				
1	Regression	25,104	2	12,552	20,201	,000 ^b				
	Residual	83,261	134	,621						
	Total	108,365	136							

a. Dependent Variable: Intention

b. Predictors: (Constant), Enjoyment, Economic

Coefficients^a

		Unstandardize	d Coefficients	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1,244	,310		4,010	,000
	Economic	,266	,082	,268	3,233	,002
	Enjoyment	,389	,106	,305	3,684	,000,

a. Dependent Variable: Intention

Appendix L – Statistics and linear regression for attitude and intention

Table L1: Mean and standard deviation for attitude and intention

Statistics									
		Attitude	Intention						
Ν	Valid	137	137						
	Missing	0	0						
Mear	ı	3,7007	3,14						
Medi	an	3,6667	3,00						
Std. [Deviation	,56488	,893						

Table L2: Percentages for the variable intention

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sterk mee oneens	7	5,1	5,1	5,1
	Oneens	22	16,1	16,1	21,2
	Neutraal	56	40,9	40,9	62,0
	Mee eens	49	35,8	35,8	97,8
	Zeer mee eens	3	2,2	2,2	100,0
	Total	137	100,0	100,0	

Intention

Table L3: Linear regression results for the relationship between attitude and intention

			Change Statistics					
R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
,470	,466	,652	,470	119,776	1	135	,000	
		R Square Square ,470 ,466	R Square Square the Estimate	R Square Square the Estimate Change	R Square Square the Estimate Change F Change	R Square Square the Estimate Change F Change df1	R Square Square the Estimate Change F Change df1 df2	

Model Summary^b

b. Dependent Variable: Intention

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50,945	1	50,945	119,776	,000 ^b
	Residual	57,420	135	,425		
	Total	108,365	136			

a. Dependent Variable: Intention

b. Predictors: (Constant), Attitude

Coefficients^a

		Unstandardize	Standardized Coefficients			
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-,871	,371		-2,350	,020
	Attitude	1,083	,099	,686	10,944	,000,

a. Dependent Variable: Intention

Appendix M – Independent-Samples t-test output

Table M1: t-test men versus women

					Boo	tstrap ^a	
						95% Confidence Interv	
	Wat is uw geslacht?		Statistic	Bias	Std. Error	Lower	Upper
Attitude	Vrouw	N	76				
		Mean	3,7939	,0003	,0641	3,6667	3,9155
		Std. Deviation	,56297	-,01023	,06932	,42303	,68945
		Std. Error Mean	,06458				
	Man	N	61				
		Mean	3,5847	-,0022	,0694	3,4369	3,7150
		Std. Deviation	,54994	-,00754	,05949	,41821	,65744
		Std. Error Mean	,07041				

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Independent Samples Test

		Levene's Test Varia					t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	
Attitude	Equal variances assumed	,148	,702	2,184	135	,031	,20916	,09579	
	Equal variances not assumed			2,189	129,876	,030	,20916	,09554	

Bootstrap for Independent Samples Test

			Bootstrap ^a						
		Mean				95% Confide	ence Interval		
		Difference	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper		
Attitude	Equal variances assumed	,20916	,00254	,09428	,027	,01982	,39497		
	Equal variances not assumed	,20916	,00254	,09428	,030	,01982	,39497		

Table M2: T-test young versus old

Group Statistics

				Bootstrap ^a					
						95% Confide	nce Interval		
	youngold		Statistic	Bias	Std. Error	Lower	Upper		
Attitude	Young	Ν	109						
		Mean	3,7125	-,0012	,0564	3,5976	3,8210		
		Std. Deviation	,57640	-,00390	,05400	,47154	,68182		
		Std. Error Mean	,05521						
	Older	Ν	28						
		Mean	3,6548	-,0040	,1025	3,4352	3,8413		
		Std. Deviation	,52495	-,01400	,09508	,35508	,71057		
		Std. Error Mean	,09921						

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Independent Samples Test

		Levene's Test Varia					t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	
Attitude	Equal variances assumed	,000	,998	,481	135	,631	,05778	,12002	
	Equal variances not assumed			,509	45,229	,613	,05778	,11353	

Bootstrap for Independent Samples Test

			Bootstrap ^a					
		Mean				95% Confide	nce Interval	
		Difference	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper	
Attitude	Equal variances assumed	,05778	,00278	,11537	,600	-,15918	,29879	
	Equal variances not assumed	,05778	,00278	,11537	,602	-,15918	,29879	

Table M3: Working individuals (part-time, full-time, entrepreneur) versus retirees

Group Statistics

					Boo	Bootstrap ^a		
						95% Confide	ence Interval	
	Work_vs_Retired		Statistic	Bias	Std. Error	Lower	Upper	
Attitude	Working individuals	Ν	91					
		Mean	3,7436	-,0006	,0608	3,6139	3,8571	
		Std. Deviation	,57965	-,00592	,06140	,44307	,69042	
		Std. Error Mean	,06076					
	Retirees	Ν	32					
		Mean	3,6458	,0026	,0908	3,4599	3,8182	
		Std. Deviation	,51457	-,01631	,08133	,36237	,66509	
		Std. Error Mean	,09096					

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Independent Samples Test Levene's Test for Equality of Variances t-test for Equality of Means Std. Error Difference Mean F Sig. df Sig. (2-tailed) Difference t Equal variances Attitude ,006 ,940 ,844 121 ,400 ,09776 ,11585 assumed Equal variances not 60,676 ,894 ,375 ,09776 ,10939 assumed

Bootstrap for Independent Samples Test

				Bootstrap ^a			
		Mean			95% Confide	ence Interval	
		Difference	Bias	Std. Error	Lower	Upper	
Attitude	Equal variances assumed	,09776	-,00317	,10748	-,11361	,31276	
	Equal variances not assumed	,09776	-,00317	,10748	-,11361	,31276	

Table M4: T-test retirees versus all other employment situations

Group Statistics

					Boo	tstrap ^a	
						95% Confide	ence Interval
	Retired_\	vs_other	Statistic	Bias	Std. Error	Lower	Upper
Attitude	Others	Ν	102				
		Mean	3,7320	-,0003	,0564	3,6133	3,8416
		Std. Deviation	,58028	-,00553	,05932	,45885	,69037
		Std. Error Mean	,05746				
	Retired	Ν	32				
		Mean	3,6458	,0067	,0922	3,4646	3,8333
		Std. Deviation	,51457	-,01857	,08446	,35501	,66961
		Std. Error Mean	,09096				

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Independent Samples Test

		Levene's Test Varia					t-test for Equality	ofMeans
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Attitude	Equal variances assumed	,002	,963	,752	132	,453	,08619	,11459
	Equal variances not assumed			,801	57,844	,426	,08619	,10759

Bootstrap for Independent Samples Test

					Bootstrap ^a		
		Mean				95% Confide	ence Interval
		Difference	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper
Attitude	Equal variances assumed	,08619	-,00700	,10824	,421	-,14207	,28976
	Equal variances not assumed	,08619	-,00700	,10824	,435	-,14207	,28976

Table M5: T-test workers versus non-workers (retirees, unable to work and disabled)

Group Statistics

					Boo	Bootstrap ^a					
						95% Confide	nce Interval				
	Workers_vs_n	onworkers	Statistic	Bias	Std. Error	Lower	Upper				
Attitude	Workers	Ν	91								
		Mean	3,7436	-,0024	,0631	3,6105	3,8689				
		Std. Deviation	,57965	-,00422	,06309	,44657	,69857				
		Std. Error Mean	,06076								
	Non workers	Ν	43								
		Mean	3,6434	-,0006	,0806	3,4650	3,7984				
		Std. Deviation	,53152	-,01104	,07080	,38279	,66408				
		Std. Error Mean	,08106								

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Independent Samples Test

		Levene's Test Varia					t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	
Attitude	Equal variances assumed	,064	,800	,959	132	,340	,10018	,10451	
	Equal variances not assumed			,989	89,308	,325	,10018	,10130	

Bootstrap for Independent Samples Test

					Bootstrap ^a		
		Mean				95% Confide	ence Interval
		Difference	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper
Attitude	Equal variances assumed	,10018	-,00176	,10016	,318	-,09203	,31050
	Equal variances not assumed	,10018	-,00176	,10016	,321	-,09203	,31050

Table M6: T-test low educated versus high educated

Group Statistics

				Bootstrap ^a					
					95% Confidence Interva				
	Education_grou	ps	Statistic	Bias	Std. Error	Lower	Upper		
Attitude	Low educated	Ν	72						
		Mean	3,6898	-,0008	,0685	3,5572	3,8241		
		Std. Deviation	,57959	-,00876	,06398	,45230	,70302		
		Std. Error Mean	,06830						
	High educated	Ν	65						
		Mean	3,7128	-,0027	,0693	3,5633	3,8424		
		Std. Deviation	,55238	-,00708	,07397	,39908	,69369		
		Std. Error Mean	,06851						

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

				Independ	lent Samp	les Test		
		Levene's Test Varia					t-test for Equality	ofMeans
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Attitude	Equal variances assumed	,512	,476	-,237	135	,813	-,02301	,09699
	Equal variances not assumed			-,238	134,593	,812	-,02301	,09675

Bootstrap for Independent Samples Test

					Bootstrap ^a		
		Mean				95% Confide	ence Interval
		Difference	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper
Attitude	Equal variances assumed	-,02301	,00196	,09517	,817	-,20953	,16754
	Equal variances not assumed	-,02301	,00196	,09517	,817	-,20953	,16754

Table M7: T-test low income group versus high income groups

Group Statistics

				Bootstrap ^a					
						95% Confide	nce Interval		
	Low_vs_high_income		Statistic	Bias	Std. Error	Lower	Upper		
Attitude	Low_income	N	31						
		Mean	3,8495	,0010	,0950	3,6667	4,0404		
		Std. Deviation	,54323	-,01471	,08094	,35716	,67604		
		Std. Error Mean	,09757						
	High_income	N	32						
		Mean	3,6146	,0028	,1010	3,4064	3,8000		
		Std. Deviation	,58112	-,02178	,10176	,37173	,76617		
		Std. Error Mean	,10273						

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

		Independent Samples Test							
		Levene's Test Varia				t-test for Equality	ofMeans		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	
Attitude	Equal variances assumed	,351	,556	1,656	61	,103	,23488	,14183	
	Equal variances not assumed			1,658	60,925	,102	,23488	,14168	

Bootstrap for Independent Samples Test

			Bootstrap ^a						
		Mean				95% Confide	ence Interval		
		Difference	Bias	Std. Error	Sig. (2-tailed)	Lower	Upper		
Attitude	Equal variances assumed	,23488	-,00185	,13795	,105	-,02922	,50969		
	Equal variances not assumed	,23488	-,00185	,13795	,105	-,02922	,50969		

Table M8: T-test low and middle income groups versus high income group

Group Statistics

					Boo	tstrapª	
						95% Confide	ence Interval
	Lowmiddle_vs_high		Statistic	Bias	Std. Error	Lower	Upper
Attitude	Low+middle_income	Ν	81				
		Mean	3,7490	,0020	,0652	3,6173	3,8780
		Std. Deviation	,58815	-,00540	,06501	,45456	,70739
		Std. Error Mean	,06535				
	High_income	Ν	32				
		Mean	3,6146	-,0001	,1064	3,3951	3,8055
		Std. Deviation	,58112	-,01781	,10881	,35707	,77843
		Std. Error Mean	,10273				

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

		Independent Samples Test							
		Levene's Test fo Varianc	t-test for Equality of Mea				of Means		
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	
Attitude	Equal variances assumed	,046	,830	1,098	111	,275	,13439	,12239	
	Equal variances not assumed			1,104	57,517	,274	,13439	,12175	

Bootstrap for Independent Samples Test

			Bootstrap ^a						
		Mean Difference	Bias	Std. Error	Sig. (2-tailed)	95% Confide Lower	nce Interval Upper		
Attitude	Equal variances assumed	,13439	,00213	,12496	,283	-,10377	,39140		
	Equal variances not assumed	,13439	,00213	,12496	,283	-,10377	,39140		

Table M9: T-test low income group versus middle and high income groups

Group Statistics

					Boo	strap ^a	
						95% Confide	ence Interval
	Low_vs_middlehigh		Statistic	Bias	Std. Error	Lower	Upper
Attitude	Low_income	Ν	31				
		Mean	3,8495	-,0013	,0941	3,6778	4,0370
		Std. Deviation	,54323	-,01752	,07961	,36165	,67862
		Std. Error Mean	,09757				
	Middle+high_income	Ν	82				
		Mean	3,6585	-,0037	,0654	3,5181	3,7843
		Std. Deviation	,59715	-,00547	,06335	,46273	,71288
		Std. Error Mean	,06594				

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples

Independent Samples Test Levene's Test for Equality of Variances t-test for Equality of Means Mean Difference Std. Error F Sig. (2-tailed) Difference Sig. df t Equal variances Attitude ,521 ,472 1,553 111 ,123 ,19093 ,12293 assumed Equal variances not 1,621 59,101 ,110 ,19093 ,11776 assumed

Bootstrap for Independent Samples Test

			Bootstrap ^a						
		Mean Difference	Bias	Std. Error	Sig. (2-tailed)	95% Confide Lower	ence Interval Upper		
Attitude	Equal variances assumed	,19093	,00238	,11257	,096	-,02440	,41909		
	Equal variances not assumed	,19093	,00238	,11257	,097	-,02440	,41909		