

University of Twente, Enschede (NL)
Westfälische Wilhelms-Universität Münster (DE)

Academic Year 2018

Bachelor Thesis

An alternative marketplace of the 21st century and its underlying values

Understanding the effects of materialist and post-materialist
values on people's participation in the Sharing Economy

Lea Sophie Rau, s1856537

Date of presentation: July 4, 2018

Public Governance across Borders/European Public Administration

Abstract

This thesis examines the effect of material and post-material value orientations, as coined by Ronald Inglehart, on people's participation in the Sharing Economy in terms of frequency and motivation. In line with previous research, the following hypotheses are stated: people with stronger post-materialist values, younger age, university education and an urban living area are expected to participate (a) on a higher frequency and (b) due to social and environmental motivations. In comparison, people with stronger materialist values, older age, vocational training or lower education and a rural, suburban or small town living area are expected to participate (a) on a lower frequency and (b) due to economic motivations. The effects of age, education and living area on frequency of participation and type of motivation are expected (c) to be mediated by people's value orientation (materialist vs. post-materialist). Quantitative data was collected from 217 survey respondents. The results show that materialists are in fact more tempted to participate due to economic motivation while post-materialists are more driven by social and environmental motivations; that younger people do participate on a higher frequency compared to older people; and that people with university education participate on a higher frequency compared to people with vocational training or lower education. The variable of people's value orientation does not have the expected mediation effects. The research concludes that materialist or post-materialist value orientations affect people's participation in the Sharing Economy only to a very limited extent.

Table of contents

Abstract

1. Introduction to the research	1
2. Theoretical context.....	4
2.1. The Sharing Economy.....	4
2.2. Ownership and sharing	5
2.3. Motivations for participation in the Sharing Economy	7
2.4. Inglehart's theory on materialist and post-materialist values.....	10
2.5. Value orientations and education	12
2.6. Rural-urban differences.....	14
2.7. Hypotheses in a causal diagram	17
3. Methodology	17
3.1. Research Design	17
3.2. Data collection and sampling	18
3.3. Operationalization of the variables	19
3.4. Descriptive statistics.....	23
3.4.1. Frequencies describing the sample	24
3.4.2. Frequencies by people's value orientation.....	25
4. Analysis	27
4.1. Bivariate analysis: means and t-tests	27
4.2. Multivariate analysis: regression analysis.....	33
5. Conclusion.....	42
6. References.....	48
7. Data Appendix	53

1. Introduction to the research

In the early 1990s, the internet was technically opened to the general public. New applications for different areas of life, such as science, business or transfer of information, developed or were generated. People started using the internet as one central platform of communication. One of these new applications is the Sharing Economy, a phenomenon that is not only popular in current research but also rapidly gaining popularity among the society. Although most articles on this topic are lacking a consensus on what the Sharing Economy comprises (Botsman, 2013; Codagnone & Martens, 2016) and most scholars focus on normative and conceptual studies (Codagnone & Martens, 2016), various definitions are circulating, all describing different types and ideas of the Sharing Economy. Derived from these definitions, mainly from the one Frenken et al. (2015) provided, and with the aim to limit the term Sharing Economy to those platforms enabling product sharing, it is defined in this thesis as follows: *The Sharing Economy is a digital economy in which consumers or firms grant each other temporary or ultimate access to their under-utilized physical assets, possibly for money, by the use of digital platforms.* In this way, sharing is no longer limited to friends and family but open to neighborhoods, cities and even worldwide communities of personally unknown participants. In times of rising sustainability awareness, the Sharing Economy can be one instrument of more efficient use of limited or excess resources. However, as most economies are, the Sharing Economy is dependent on the aims and ambitions of its participants. It would not be the first idea of generating sustainability starting with a great potential and ending up being exploited by people that use it for their own profit and to the detriment of others or the environment (Martin, 2015). Therefore, examining participants and their motivation in greater depth can help to forecast the Sharing Economy's future direction and perhaps avoid the exploitation of the Sharing Economy's potential.

The Sharing Economy is a challenge to the principle of ownership as it allows people to use a good without purchasing and even without owning it. This is true from a social, a legal and an economic perspective. As Belk (1988; 2014a) puts it: we moved from "you are what you own" to "you are what you can access". Indeed, the Sharing Economy is not the first expression to describe this shift, however, it is the first digital one. While ownership means safety to some people, sharing means freedom to others. These two different attitudes towards ownership and sharing are both essential for understanding the Sharing Economy in regards to the frequency of participation and motivations of participants. Various scholars (e.g. Hamari et al., 2015; Schor, 2014; Ozanne & Ballantine, 2010; Lamberton & Rose, 2012; Balck & Cracau, 2015) studied the motivations for participation in the Sharing Economy, some more in general, others in greater depth, whereby the three categories of economic, environmental and social motivations can be identified (Böcker & Meelen, 2017).

To fully examine people's participation in the Sharing Economy, it is necessary to go

one step further: what are the identified motivations based on? Motivation and transfer into action can be based on social or personal values (Rohan, 2000) which are transsituational (Roccas et al., 2002) and relatively stable (Bilsky & Schwartz, 1994) and therefore meaningful to explain human behavior. In this context, values are a synonym for moral concepts or personal ideals. Immersing deeper into the concepts of people's value orientations in relation to their motivations for participation in the Sharing Economy requires the application of scientific theory and tools. Values as a central stimulant in the Sharing Economy are rather rarely addressed in available research (Black & Cherrier, 2010; Martin & Upham, 2015). The aim of this thesis is to study these underlying values and their effect on a system that is based on the concept of ownership and sharing. Therefore, it is evident to relate to Ronald Inglehart's theory on materialist and post-materialist values (Inglehart, 1971). Also, materialists are expected to be driven by economic motivations for participation in the Sharing Economy while post-materialists are expected to be driven by environmental and social motivations. Derived from literature and the presented motivations for participation, it is assumed that the Sharing Economy is primarily a post-materialist phenomenon with post-materialists participating on a higher frequency. On the contrary, materialists are assumed to value ownership, a concept which is undermined by the Sharing Economy. Therefore, materialists are expected to participate in the Sharing Economy on a lower frequency. The sustainability context of this thesis is underlined by Inglehart's argument that post-materialists are more interested in the environment and society (Inglehart, 2000). The growing number of people oriented towards post-materialist values can be related to the increasing awareness of sustainability issues in society, politics and business.

In times of ever-increasing digitalization, data protection becomes more and more important. This is also true for the Sharing Economy: those who have in-depth theoretical knowledge about the participants have the opportunity to influence the Sharing Economy's development. This is especially problematic as the Sharing Economy is standing at the beginning of a development whose direction is not yet set. As Martin (2015) puts it: is the Sharing Economy a pathway to sustainability or a nightmarish form of neoliberal capitalism? In general, governments and institutions should be prepared to protect citizens from such dangers regarding their privacy and their suggestibility. However, having such detailed knowledge first, they could forecast which negatively seen influences the Sharing Economy will probably face and thereby intervene in time. Assuming that governments and institutions have an interest in sustainable development, they may also make use of in-depth theoretical knowledge about the Sharing Economy. Referring back to the value theory applied in this thesis, identifying values of participants means finding motivations for participation in the Sharing Economy. By acquiring this knowledge, aim-oriented campaigns become marketable. Participants can be activated to promote "good" political aims such as the protection of the

environment. Participants of the Sharing Economy are of special interest for such campaigns as the common perception characterizes them as future oriented, innovative and fair (Albinsson & Perera, 2012). The Sharing Economy is, at least partly, an idealistic phenomenon, based on the principles of trust and assessment. As soon as the underlying idealism of these common assumptions is misused and exploited, the general concept will be damaged. Therefore, understanding people's value orientations towards the Sharing Economy is not only crucial to those who want to take advantage to the detriment of others but also to those who want to protect the system of sharing. Finally, the Sharing Economy expresses a transformation in societies: Interests are bundled, communities are extended and built and social capital increases (Albinsson & Perera, 2012). Summing up, the Sharing Economy changes economy and society by providing alternatives to current systems and opportunities for new development. However, the direction the Sharing Economy is heading in, and its long-term consequences, are not fully comprehensible yet, wherefore from a scientific as well as from a societal perspective further research is highly relevant. This thesis will contribute to this research by producing new knowledge on the value orientations of Sharing Economy participants.

To make a first step in the direction of analyzing people's value orientations, the aim of this thesis is to answer the following explanatory research question: *"To what extent do materialist or post-materialist value orientations affect people's participation in the Sharing Economy?"*. By studying the relationship between people's value orientations and their participation in the Sharing Economy, the results contribute to the limited empirical research on the Sharing Economy. To dive deeper, two sub-questions are examined. Firstly, the question *"To what extent can people's value orientations explain their frequency of participation in the Sharing Economy?"* seeks to address differences in frequency of participation in the Sharing Economy between materialist and post-materialist oriented people. Secondly, this thesis tackles the question: *"To what extent can people's value orientations explain their motivation for participation in the Sharing Economy?"* in order to examine the relationship between people's value orientations and the motivations driving their participation in the Sharing Economy. The thesis connects people's value orientations to the potential motivations for participation in the Sharing Economy identified by various scholars. By studying not only the effect of people's value orientations on the frequency of their participation, but also on their motivations for participation in the Sharing Economy, a comprehensive answer to the main research question is concluded.

Following this introduction, the thesis topic is embedded into a broader theoretical context from which hypotheses are derived. As a next step, data is presented, analyzed and discussed by the method of statistical hypotheses testing. Finally, these results are used to answer the thesis' research questions.

2. Theoretical context

This thesis connects Inglehart's theory on materialist and post-materialist values to the new phenomenon of the Sharing Economy. To set these two components in a broader context, a theoretical introduction covering all important aspects raised in this thesis is presented in the following.

2.1. The Sharing Economy

In the 21st century, sustainability is a ubiquitous topic impacting markets, consumer behaviors and personal behavior. To enhance sustainability, people develop and highlight practices including alternative consumption such as sharing, collaborative consumption or unconsumption (Albinsson & Perera, 2012). Walker defines the term unconsumption as "everything that happens after an act of acquisition" (Albinsson & Perera, 2012). One of these alternative consumption forms is the Sharing Economy, a relatively new phenomenon that is popular in current research. The increase in Sharing Economy participant numbers indicates that people's preferences regarding goods and ownership are changing (Albinsson & Perera, 2012). Sheth et al. (2011) even introduce this transformation as a "new normal" of consumer's mindset, while Schor (2011) refers to the increase as a "wave of social innovation", driven by the sustainability awareness and enabled through the use of the internet.

Most scholars writing on the Sharing Economy focus on the normative and conceptual examination of the topic to build a first basis for further research (Codagnone & Martens, 2016). Still, the terminology is rather unclear and most scholars conducting their empirical research lack a consensus on what the Sharing Economy comprises (Botsman, 2013; Codagnone & Martens, 2016). Frenken et al. (2015) define the Sharing Economy as "consumers (or firms) granting each other temporary access to their under-utilized physical assets ("idle capacity"), possibly for money" while Stephany (2015) states that the Sharing Economy is organized by "the value in taking under-utilised assets and making them accessible online to a community, leading to a reduced need for ownership" (p. 205). Schor and Fitzmaurice (2015) describe the Sharing Economy as economic activities that are digitally connected and included in the categories of recirculation of goods, increased utilization of durable assets, exchange of services, sharing of productive assets and building of social connections. These categories represent the different forms the Sharing Economy can take: product sharing, service sharing and time sharing. However, distinctions can blur when for example time is shared at someone's apartment (e.g. Social Meal) or when a service is provided by the use of a good (e.g. Uber). Also, it is to be taken into account that many other forms of sharing are already available on the market or currently arising but not all sharing is part of the Sharing Economy where sharing is necessarily mediated by a digital platform.

A term that is sometimes even used interchangeably with the Sharing Economy is

‘collaborative consumption’ (Botsman, 2013; Codagnone & Martens, 2016), labeled by the Time Magazine in 2011 as one of “10 ideas that will change the world” under the headline “Today’s smart choice: Don’t own. Share.”, comprising renting, lending and sharing of goods (Walsh, 2011). Similar to the sharing categories identified by Juliet Schor, collaborative consumption can be categorized in product service systems, redistribution of markets and collaborative lifestyles (Albinsson & Perera, 2012). Hamari et al. (2015, p. 1) define collaborative consumption as “a peer-to-peer-based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services”. ‘Sharing’ in the form of many Sharing Economy platforms is criticized by Belk (2014b) as ‘pseudo-sharing’ as to him, fees or compensation are incompatible with ‘true sharing’. All available definitions have the aspect of sharing in common, a social behavior which is not new at all but indeed deeply rooted in most societies (Price, 1975, p. 12–13).

As a result of these various definitions and types of the Sharing Economy, a focus on one type and one definition of Sharing Economy is required for the clarity of this thesis. Therefore, the study is limited to *product sharing*, whereby the Sharing Economy is defined as a digital economy in which consumers or firms grant each other *temporary* or *ultimate* access to their *under-utilized physical assets, possibly for money*, by the use of *digital platforms*. However, it has to be taken into account that new platforms and firms participating in the process of sharing are established every day, wherefore getting a firm grip on this trend is difficult. Another difficulty is, as mentioned earlier, that some platforms fit in different types of the Sharing Economy. Examples are Uber and Airbnb: Uber drivers use their private cars, Airbnb hosts use their private apartments, wherefore they both share a physical asset but also provide a service by sharing their time and workforce, usually for money.

2.2. Ownership and sharing

On the whole, you find wealth much more in use than in ownership. —Aristotle

Concluding from definitions of the Sharing Economy, the essential concept is sharing and therefore also ownership. In 1988, Belk argued that “you are what you own”. In 2014a, he adjusted his statement in line with the latest developments to “you are what you share”. Grossman and Hart (1986) define ownership as “the purchase of the [...] residual rights of control” (p. 692). According to Belk (2007), sharing is “the act and process of distributing what is ours to others for their use and/or the act or process of receiving or taking something from others for our use” (p.126). Belk (2014b) further distinguishes between “pseudo-sharing” and “true-sharing” and characterizes “pseudo-sharing” as the “presence of profit motives, the absence of feelings of community, and expectations of reciprocity” (p. 7). Belk’s definition of “true sharing” fits Price’s (1975, p. 4) definition of sharing as “the allocation of economic goods

and services without calculating returns". As already introduced in the previous section, sharing can take several forms: it can be either for free or for money and temporarily or ultimate, wherefore a transfer of ownership may but does not necessarily have to take place. Borders between different forms of sharing can be blurred, defined by Belk as commodity exchange on the one side, gift giving in the middle and sharing on the other side (Belk, 2007).

As already stated, the concept of sharing is not new at all. What is new, is the wider circle of people that share with each other. Prior to the emergence of the internet and online sharing platforms, sharing was primarily entailing family and friends while today online platforms extend this circle to a wider community (Belk, 2007; Ozanne & Ballantine, 2010). According to Gusfield (1975), communities can be either geographic or relational, whereby the basis of the latter are human relationships independent from a certain location. Many scholars, among them Durkheim (1964), stress Gusfield's (1975) definition of relational communities by stating that a community is developed around interests and skills –the essential components of online communities. The experiences people make in communities may be explained by the connectedness, the shared values, norms and meanings that constitute the quality of a network (Etzioni, 1996). The characteristics of communities connote social capital, defined by Putnam (2000, p. 19) as "connections among individuals—social networks and the norms of reciprocity and trustworthiness that arise from them." The traditional "sharing circle" is described by Belk as "sharing in" (Belk 2010), as an inclusive act, while the internet enforces what Belk describes as "sharing out", which means sharing with "strangers".

Because the Sharing Economy provides large platforms of sharing, it reduces the need for ownership (Stephany, 2015) and thereby prioritizes utilization and accessibility over ownership (Schor & Fitzmaurice, 2015). As already introduced in the previous section, Schor and Fitzmaurice (2015) identify five different categories within the Sharing Economy with which other scholar's findings are in line. The role of ownership in the different types of the Sharing Economy is clarified in the following: EBay Classifieds is an example for the first category "recirculation of goods", whereby a transfer of ownership takes place as goods are sold second hand. The second category is the "increased utilization of durable assets". Hereby, physical assets, which are not used to capacity by their owners, are shared with others but the ownership is not transferred. Prominent examples are Couchsurfing, Airbnb, Neighbourgoods and Uber. The third category, the "exchange of services", has not grown as rapidly as others and is not included in this thesis (Schor & Fitzmaurice, 2015). Platforms of this category, an example is TaskRabbit, focus on tasks instead of goods, wherefore ownership is not primarily an issue. Exceptions are cases in which a good is used to give a service to someone. "Sharing of productive assets" is the fourth category, focusing on enabling production rather than consumption of an asset. For example, makerspaces provide tools that can be used by various people for production. In this type of Sharing Economy, an

asset is owned jointly and therefore shared. Finally, the fifth category aims for increased social connection, an aim mainly purchased by neighborhood platforms such as Mama Bake. This category focuses only partly on the sharing of a physical asset (food or the place to eat in the example of Mama Bake) and therefore only fits the applied definition to a certain extent.

Resulting from this theoretical background, it becomes clear that the Sharing Economy challenges the concept of ownership by making it unnecessary or avoidable to own certain assets and by making it possible to share assets that are not fully used with others. However, the Sharing Economy does not only challenge ownership by ousting it but also from a legal perspective which has not yet adjusted to the new trends. The problem resulting from this backlog is comprehensively examined by Kreiczer-Levy (2016) who states that the Sharing Economy and intensified online communication challenge the foundational definitions of property as privately used on the one hand and as commercially used on the other hand. This legal distinction was originally made to protect people's property and thereby their privacy and freedom (Kreiczer-Levy, 2016). It also challenges the general, perhaps outdated, idea of Belk's "you are what you own" as people now often prefer to access and no longer own property (Balkin, 1987). Kreiczer-Levy (2016) outlines the debate over either to return to original definitions of property or to create a new and adjusted definition and suggests a reinvention of traditional property categories to be able to keep up with new developments: "Personal consumption property should be understood as an intermediate environment between the private, secluded, homogenous—and hence intimate—space and the public, regulated, commercial space" (Kreiczer-Levy, 2016, p. 66).

2.3. Motivations for participation in the Sharing Economy

Why should you share what is yours with someone you do not even know personally? And is it not safer to own something instead of being dependent on a stranger's willingness to share something you need? Various scholars examined what drives people to participate in the Sharing Economy. In general, motivations fall into the three categories of social, environmental or economic motivation.

This categorization is supported by Böcker and Meelen (2017) who dedicated a full research to the identification of motivations for participation in the Sharing Economy with a title that is largely in line with the well-known triple-p framework of sustainability (Elkington, 1997): Sharing for people, planet or profit. Böcker and Meelen not only found motivations for participation in the Sharing Economy but also that motivations "differ between socio-demographic groups, between users and providers, and especially between different types of shared goods" (p. 14), wherefore they stress the importance of not perceiving the Sharing Economy as one coherent phenomenon. Most scholars writing on the topic leave it with the identification of motivations. Their results will be presented in the following, categorized in line

with Böcker and Meelen's categories presented above.

The first category is the one of social motivations which Böcker and Meelen (2017) termed "sharing for people". This category is of special importance as many Sharing Economy forms center on the personal interaction between user and provider of a good (Böcker & Meelen, 2017). An example of such a social interaction is the original idea of Airbnb where guests meet their local hosts and are thereby not only provided with accommodation but also with a first introduction to the local community. Tussyadiah (2015) found exactly this interaction to be an important driving force of accommodation Sharing Economies. However, and as with most Sharing Economy platforms, motivations are not shared by all participants, which is why Tussyadiah (2016) also found that some users in the accommodation Sharing Economy especially look for places to stay which do not imply social interaction with the host. Hamari et al. (2015) conducted a study on the reason for people's participation in collaborative consumption and found that participants are motivated by various factors, including general enjoyment. Juliette Schor (2014) debated the Sharing Economy from different perspectives and identified, *inter alia*, the opportunity for increased social connections, the novelty of the economy and a commitment to social transformation as motivations for participation. Sandikci and Ekici (2009) state that also political ideologies can be driving forces for participation. Albinsson and Perera (2012) do not only state the sense of community as a driver but also as an outcome of participation in the Sharing Economy in their study on sharing events as alternative marketplaces in the 21st century. This statement fits with Botsman and Roger's (2011) claim that getting to know people and making friends via participation in the Sharing Economy stimulate further Sharing Economy participation. Albinsson et al. (2010) identify cultural and social ideals as motivations. Social motivations can also be represented in anti-capitalist sentiments as identified by Hamari et al. (2015). These sentiments fit with Lamberton and Rose's (2012) finding of "market-avoiders" among the Sharing Economy participants and Schor's (2014) description of the Sharing Economy as an alternative to a capitalist system with some platforms being more alternative than others. Making a first step in the direction of value studies, Black and Cherrier (2010) state that participants are motivated by their individual needs and values. Taking up the identification of values as drivers, Martin and Upham's (2015) study of free reuse groups such as Freecycle shows that most participants have stronger self-transcendence, that means pro-social, values compared to the wider UK population.

The following motivations match the category "sharing for planet" which means that sharing is motivated by environmental reasons. These motivations are based on the presumed potential of the Sharing Economy to contribute to a more sustainable market (Heinrichs, 2013) by allowing for increased efficiency in the use of goods. However, it is important to note that there is no clarity yet on the long-term environmental effects of the

Sharing Economy (Böcker & Meelen, 2017; Martin, 2015). Nevertheless, the potential for sustainability is identified by Hamari et al. (2015), in line with Schor (2014), as a motivation for participation in the Sharing Economy while Lamberton and Rose (2012) name utilitarian motivations. “To be green” is found to be the main motivation among users of the sharing platform Ecomodo (Piscicelli et al., 2014). However, there is no final evidence on a linkage of environmental motivations and Sharing Economy participation. This may be due to the variety of Sharing Economy platforms and the variety of personal values underlying the motivations of Sharing Economy participants. For example, research on accommodation sharing (Tussyadiah, 2016) and car sharing (Möhlmann, 2015) found no influence of environmental motivations on the intention to use similar services again.

This leads us to the final category of “sharing for profit” which includes economic motivations that potentially take effect where environmental and social motivations cannot or do not grip. Hereby, the financial crisis of 2008 and the rise of the Sharing Economy are often linked. While financial situations have not been that much of an issue before, the crisis triggered and increased financial difficulties, wherefore people started to rethink their consumption patterns and the importance of ownership (Gansky, 2010). Available literature on motivations in the Sharing Economy mainly focuses on the social and the environmental category but also some support of economic motivations can be found. Hamari et al. (2015) confirm that economic gains are a motivation for participation as a result of their study on the sharing platform Sharetribe, an online marketplace. While it was stated above that Tussyadiah (2015, 2016) found no environmental motivation in accommodation sharing, economic motivations were found to be an important driving force. Möhlmann (2015) identifies “cost savings” to increase user satisfaction among accommodation and car sharing participants. While utilitarian motivations can be placed in the social and the environmental category, they also suit the category of economic motivations when it comes to saving money. This aspect was identified as a driving force among Zipcar participants in Bardhi and Eckhardt’s (2012) interview-based study.

Referring back to the section on ownership and sharing, Baumeister and Wangenheim’s (2014) study on 2000 randomly assigned German respondents shows that, although the Sharing Economy is rising, “the attitude towards access is consistently worse than the attitude towards ownership across all product categories” (Codagnone & Martens, 2016, p. 20). However, Balck and Cracau (2015) found, inter alia, that No Ownership is one of the main motivations for consumers in the Sharing Economy, dominating in the analyzed sectors accommodation, car sharing, commodities, and clothing.

It has to be taken into account that most of the presented motivations are results of studies that focus on specific sharing platforms or small groups of sharing platforms with relatively small samples, wherefore they can only draw a general picture of motivations for

participation in the Sharing Economy when viewed combined. Furthermore, looking at the various studies and results, it becomes clear that motivations differ to the extent that platforms differ. Some sharing platforms and their users are more environmentally or socially, others are more economically driven. This stresses again the importance of not perceiving the Sharing Economy as one coherent phenomenon but more as an umbrella term for different types of newly rising digital economies in the three sectors of social, environmental and economic economies.

2.4. Inglehart's theory on materialist and post-materialist values

The Sharing Economy is a rather new phenomenon, wherefore it is not surprising that available literature on the topic lacks a certain theoretical depth. To contribute to a further examination of the Sharing Economy, this thesis does not only ask for motivations for participation but also for where these motivations come from. According to Rohan (2000), motives and actions of people can be based on values. Therefore, the underlying theory of this thesis must be a value-theory, preferably related to the concepts of ownership and sharing and to the three categories of economic, social and environmental motivations for participation in the Sharing Economy.

A political scientist and director of the World Value Survey is Ronald Inglehart, who is well-known for his theory on value change which he introduced in his article "The Silent Revolution" in 1971. According to Inglehart and his theory, value-orientations in post-industrial societies are shifting from materialist to post-materialist values and by the use of surveys asking specific questions, called the Inglehart Index, he was able to prove this shift. The basis for Inglehart's statement on value change is Abraham Maslow's "hierarchy of needs" (1943) which claims that human needs build a pyramid. Humans strive to satisfy the needs of the first stage before the needs of the second stage come to the front. Based on this hierarchy, Inglehart (1977) developed two hypotheses: the scarcity hypothesis states that "an individual's priorities reflect the socioeconomic environment. One places the greatest subjective value on those things that are in relatively short supply" (Inglehart, 2000, p. 220). The socialization hypothesis states that "the relationship between socioeconomic environment and value priorities is not one of immediate adjustment; a substantial time lag is involved for one's basic values reflect the conditions that prevailed during one's pre-adult years" (Inglehart, 2000, p. 220). According to these hypotheses, post-materialist value orientations increase when prosperity in a society increases. But what are materialist vs post-materialist values? According to Inglehart's findings, people with materialist values have physiological needs and stress physical and economic security while people oriented towards post-materialist values "strive for self-actualization, stress the aesthetic and the intellectual, and cherish belonging and esteem" (Held et al., 2009, p. 57) and emphasize autonomy, quality of life and self-

expression (Inglehart, 2008). Furthermore, the need for belonging and a participatory role in society are prominent in post-materialism (Inglehart, 2000). The intergenerational shift from materialist to post-materialist values is therefore a shift from survival to self-expression values (Inglehart, 2000) with self-expression values that value “environmental protection, tolerance of diversity and rising demands for participation in decision-making in economic and political life” (Inglehart, 2000, p.140).

Summing up, Inglehart’s materialist and post-materialist values suit the concepts of ownership and sharing. Also, economic motivations for participation in the Sharing Economy can be related to materialists, who value economic security, while social and environmental motivations can be related to post-materialists and their values of self-expression. However, scholars also identify economic motivations as driving forces for participation in the Sharing Economy, wherefore sharing is not necessarily a pure post-materialist activity. Examining this expected clash between materialist and post-materialist value orientations in the Sharing Economy in relation to economic and social/environmental motivations for participation can give important insights in how the economy will develop and whether or not this development will be in line with current efforts on strengthening sustainable economies.

It is assumed that the Sharing Economy is a mainly post-materialist phenomenon as it is about access to products or transfer of ownership and not about exclusive ownership. Based on the assumption that materialists attach higher importance to ownership than post-materialists, they are expected to participate in the Sharing Economy on a lower frequency, while post-materialists are expected to participate on a higher frequency. Furthermore, motivations for participation in the Sharing Economy can be related to materialist or post-materialist values with an economic category on the one hand and a social and environmental category on the other hand. Resulting from this, the following two hypotheses are presented as the main hypotheses of this thesis:

- H1a** *People with stronger materialist values tend to participate in the Sharing Economy on a lower frequency compared to people with stronger post-materialist values who participate on a higher frequency.*
- H1b** *People with stronger materialist values tend to participate in the Sharing Economy due to economic reasons while people with stronger post-materialist values tend to participate due to social or environmental reasons.*

According to Inglehart's theory on value change (1971), industrial societies become more post-materialist with each new cohort being born. As it is expected that post-materialists have a stronger interest in the Sharing Economy, this must mean that younger people

participate on a higher frequency than older people and due to post-materialist motivations which are related to the social and environment categories. This second assumption is supported by the fact that the internet and digital means play an increasing role in the lives of the new generations while older generations did not grow up with these techniques and are therefore expected to be less familiar with it. Derived from this theoretical background, the following two hypotheses are presented:

- H2a** *Older people tend to participate in the Sharing Economy on a lower frequency compared to younger people who tend to participate in the Sharing Economy on a higher frequency.*
- H2b** *Older people tend to participate in the Sharing Economy due to economic motivations, while younger people tend to participate in the Sharing Economy due to social or environmental motivations.*
- H2c** *The effects of age on frequency of sharing (H2a) and motivations for sharing (H2b) can be explained by older people having more materialist values and younger people having more post-materialist values.*

2.5. Value orientations and education

According to Inglehart, not only a society's prosperity but also childhood experiences determine an individual's value orientation towards materialism or post-materialism (Abramson & Inglehart, 1994). If one grew up in a poor household, one will probably be oriented towards materialism while an economically secure childhood builds the basis for post-materialist values (Abramson & Inglehart, 1994). Inglehart also insisted that education is a product of this social background and an indicator of how secure respondents were in formative years. Furthermore, he states that education is a main factor in value orientation with high education leading to post-materialist values (Abramson & Inglehart, 1994).

Stubager (2008) studied the effect of education on authoritarian-libertarian values, with libertarian values having similarities with post-materialist values and authoritarian values having similarities with materialist values. The authoritarian-libertarian value dimension is also called New Politics (Brooks, 2006) and deals with issues related to non-economic matters (e.g. law and order, the role of authorities and immigration or multiculturalism) while Old Politics are primarily economically focused (Stubager, 2008). The main concept in this new value dimension is hierarchy on the one hand and tolerance for non-conformity on the other hand. Studying the authoritarian-libertarian value dimension, Stubager (2008) states that "education is the most important social antecedent of individuals' positions on [the

authoritarian-libertarian] value dimension; high education groups tend towards the libertarian pole and low education groups tend towards the authoritarian pole” (p. 327). To get a firm grip on the comprehensive education variable, Stubager distinguishes between direct and allocation effects of education with three specific models constituting the direct effects: the psychodynamic model argues that higher levels of education further psychological security and that psychologically secure people have more control over their own life. As a result, these people are more tolerant towards others and do not feel threatened that fast. The socialization model argues that “through education, individuals are exposed to values which they internalize” (Stubager, 2008, p. 330), assuming that the values imparted by higher education institutions are rather libertarian. The cognitive model argues that with increased education awareness of variation increases, too, whereby libertarian values are strengthened. The allocation effects of education, as identified by Stubager (2008), explain that higher education usually leads to a more secure position on the labor market, higher earnings and therefore a higher level of economic security which then allows for tolerance. Also, higher educated people usually have more autonomy in how to perform their job, whereby they potentially acquire libertarian values. What is stated here for authoritarian and libertarian values can be transferred to materialist and post-materialist values due to the similarities of the importance of economic security and hierarchy (materialism) on the one hand and tolerance and autonomy (post-materialism) on the other hand.

As higher educated people are, according to Abramson and Inglehart (1994), more post-materialist than lower educated people, they are expected to attach importance to the same areas of self-expression as post-materialists in general do. This expectation is supported by Van Liere and Dunlap (1980) who reviewed hypotheses, explanations and empirical evidence on the social basis of environmental concern. Their findings bear out the expectation that education is positively correlated with environmental concern. Although post-materialism cannot be limited to environmental concern, findings like this show a certain support of higher educated people being driven by post-materialist motivations.

Resulting from this insight in available literature on the education effect, it becomes necessary to include an education variable in this thesis to find out what role education plays in the relationship between materialist/post-materialist values and participation in the Sharing Economy. The related hypotheses are based on the theoretical assumption that general higher education leads to stronger post-materialist values. However, referring back to Abramson and Inglehart (1994), this education variable has to be treated cautiously as education could be mainly a product of an individual's social background. The hypotheses related to the education variable are as follows, based:

- H3a** *People with vocational training or lower education tend to participate in the Sharing Economy on a lower frequency compared to people with university education who tend to participate in the Sharing Economy on a higher frequency.*
- H3b** *People with vocational training or lower education tend to participate in the Sharing Economy due to economic motivations, while people with university education tend to participate in the Sharing Economy due to social or environmental motivations.*
- H3c** *The effects of education on frequency of sharing (H3a) and motivations for sharing (H3b) can be explained by people with vocational training or lower education having more materialist values and people with university education having more post-materialist values.*

2.6. Rural-urban differences: The Sharing Economy as an urban phenomenon

It might be that a rural-urban distinction has been very clear until some time ago. However, the internet as a platform for communication is, theoretically, accessible by everyone. Thereby, some clear differences between “rural” and “urban” blurred (Fischer, 1972). However, some authors highlight remaining differences. Hereby, unequal levels of economic growth (Dillmann and Tremblay, 1977) and unequal levels of interpersonal acquaintanceship (Freudenburg, 1986) are the most relevant differences in the context of this thesis. While studying rural-urban differences, it has to be borne in mind that urban as well as rural societies are not homogenous. In the following, the Sharing Economy and Inglehart’s materialist and post-materialist values will be placed in the rural-urban context, arguing that the Sharing Economy is an urban phenomenon.

The Sharing Economy is a digital phenomenon that derives its potential from the people participating in it. Therefore, a digital infrastructure and a sufficiently large pool of people sharing the same ideas are preconditions for its rise. The first precondition, the digital infrastructure that is required to use internet-based platforms, is more of a number issue. Worldwide, the number of internet users is increasing but differences between and within countries remain (Cheng & Wellman, 2004). While in developed countries already more than three-quarters of the population use the internet (e.g. USA: 88,5% (2016, internetlivestats.com), Germany: 81% (2017, statista.com)), there are still countries with very low numbers of internet users (country with the lowest share of internet users: Eritrea 2016, 1,1% (internetlivestats.com)). However, the divide between countries is narrowing (Cheng & Wellman, 2004). More relevant for this thesis is the digital divide within countries, the rural-urban gap. According to NTIA (National Telecommunications and Information Administration, US Department of Commerce; Carlson & Goss, 2016) only 69% of the US’ rural population,

compared to 75% of the urban population, use the internet. Analyzing the regional aspects in German digital divides, Schleife (2008) found lower rates of internet use in rural regions compared to urban regions.

Regarding the second precondition, Davidson and Infranca (2016) identify two types of reasons for why the Sharing Economy is an urban phenomenon. Firstly, city-life is full of challenges that are not an issue in rural life. An example are the difficulties that owning a car involve, especially traffic jams and parking space. The solution for this problem are ride sharing services such as Uber or neighborhood cars. However, city life is not mainly shaped by challenges but also by opportunities, wherefore Davidson and Infranca (2016) explain a second, more positive, category of reasons for why the Sharing Economy is an urban phenomenon that includes three specific reasons derived from Glaeser and Gottlieb's work on the wealth of cities (2009). First, density and proximity are characteristics of urban areas that increase productivity and enable economic growth. Second is the large pool and proximity of potential participants of the Sharing Economy. The third reason is the argument that cities facilitate interaction, whereby ideas spread more rapidly. A further point is that only some pool of people living in relative proximity and density is not sufficient, people must share mind-sets and values that make them interested in the idea of the Sharing Economy. Socialization in an urban environment is likely to enhance people's awareness for being responsible for environmental disruptions but also for having the potential to correct them (Lowe & Pinhey, 1982).

Referring back to the subject of shared mind-sets and values, Inglehart's theory on materialist and post-materialist values (1971) can be applied to the rural-urban distinction. Inglehart (2008) argues, based on a measurement from 1970 to 2006 in six West European societies, that the share of post-materialists is growing as time passes. He himself has not yet focused directly on the rural-urban distinction. However, it can be assumed that general changes take place in cities first before they spread rural areas. This assumption can be related to the general understanding of higher educated professionals being connected to an urban culture with predominantly post-materialist values while more rural areas are rather dominated by social conservatism and materialist value orientations. Norris (2000) states that post-materialism is one of the main factors predicting cosmopolitanism with cosmopolitans mainly living in urban areas. This would mean that the share of post-materialist is lower among rural residents compared to urban residents. Thinking further, the economic differences between rural and urban people are often brought up in literature studying the differences between rural and urban people in environmental concern. Hereby, economic preconditions are expected to affect the value formation (Inglehart, 1977) and environmental concern is assumed to be an expression of post-materialist value orientations (Inglehart, 2000). The general understanding in available literature is that people living in rural areas

have lower levels of environmental concern compared to people living in urban areas (Freudenburg & McGinn, 1987). However, some findings reject this statement (e.g. Milbraith, 1975) or revise it, pointing on the differences between farmers and non-farmers within a rural population (Freudenburg & McGinn, 1987). On average, rural residents' employment is more dependent from the use of natural resources. Also, local economies are less secure which leads (Freudenburg & McGinn, 1987), in line with Inglehart's scarcity hypothesis (Inglehart, 1977), to rather materialist value orientations among rural people.

In line with the literature presented in this section, it is assumed that people living in rural areas are less post-materialist than people living in urban areas. As a result, motivations for participation in the Sharing Economy are expected to differ in relation to materialist and post-materialist value orientations. Furthermore, the Sharing Economy, independently from people's value orientations on the surface, is not only a digital but also an urban phenomenon, wherefore it is expected that people living in rural areas simply do not have that much opportunities to participate in the Sharing Economy and therefore participate on a lower frequency compared to people living in urban areas. The following hypotheses represent these theoretical expectations:

- H4a** *People from rural and suburban areas or small towns tend to participate in the Sharing Economy on a lower frequency compared to people from urban areas who tend to participate in the Sharing Economy on a higher frequency.*
- H4b** *People from rural and suburban areas or small towns tend to participate in the Sharing Economy due to economic motivations, while people from urban areas tend to participate in the Sharing Economy due to social or environmental motivations.*
- H4c** *The effects of the urbanity of the living area on frequency of sharing (H4a) and motivations for sharing (H4b) can be explained by rural people having more materialist values and urban people having more post-materialist values.*

2.7. Hypotheses in a causal diagram

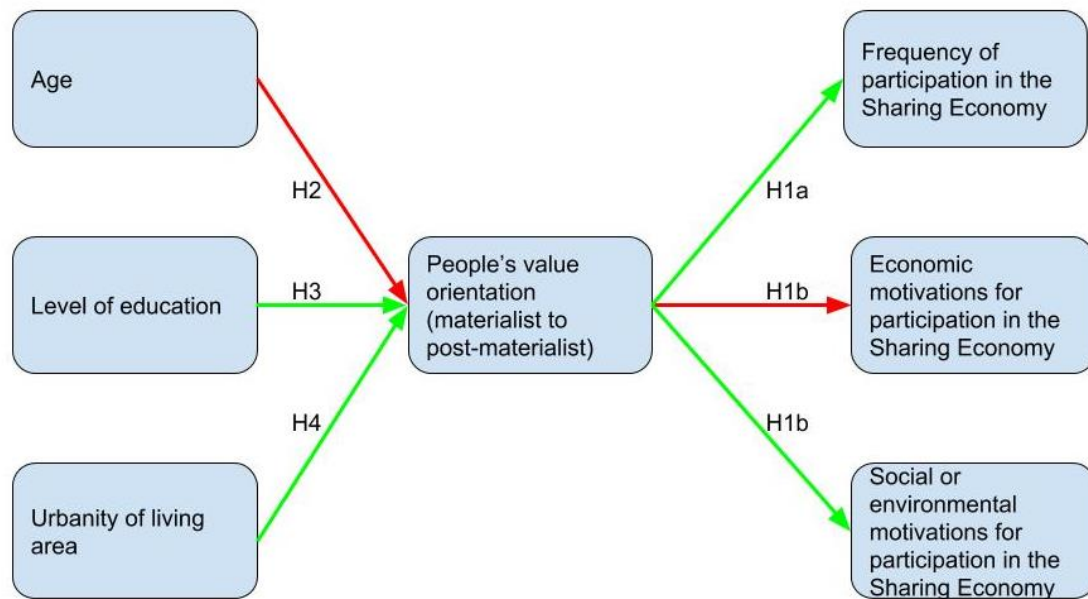


Figure 1. Visualized hypotheses

3. Methodology

In this section of the thesis, the methods used to conduct this study are outlined, starting from how data was collected and ending with presenting the final data descriptively.

3.1. Research Design

This thesis is an explanatory study using a cross-sectional research design. In this type of design, all variables of a set of units are measured at the same time and none of the variables are manipulated differently for a sub-set of units. This allows to build a rather large data set in a limited amount of time and for a quantitative analysis of these data. However, a cross-sectional research design bears the risk of threats to the validity of the research.

Internal validity is the extent to which we can trust that causality is correctly established in the test of causal hypotheses. Two major threats to internal validity have to be considered in a cross-sectional research design. Collecting data at a single point of time has the disadvantage of potential reverse causation. The research question assumes that people's value orientations are a cause of people's participation in the Sharing Economy. However, causation implies that the independent variable precedes the dependent variable/s. According to Ronald Inglehart, who coined people's value orientations as applied here, the formative years of individuals are decisive for whether they will become materialists or post-materialists. As the data used for this thesis only considers people of 18 years or older, it can be assumed that the formation of their value orientations' took place before they started, if at all they did

start, to participate in the Sharing Economy. Therefore, time order is expected to be given.

More difficult to tackle is the threat of a third variable influencing the observed relationship between an independent and a dependent variable. Non-spuriousness is therefore only given when the possibility of influence through a third variable can be excluded. To limit this threat, three additional variables, namely age, education and living area and the control variables gender and nationality are included in the study. Furthermore, influences that are not included in the analysis in form of a variable were already introduced in the theoretical context and are discussed in the conclusion of this thesis in relation to the analysis' results.

3.2. Data collection and sampling

Due to the novelty of the Sharing Economy phenomenon, only very few and restricted datasets are available. Therefore, original data in the form of an online survey was collected. The survey was created on qualtrics.com and distributed via an online link which was open from April 29 to May 29, 2018. The survey was jointly developed with a fellow student as similar respondents were required. Questions aimed for the measurement of the variables included in this research with the subject areas "Sharing Economy", "value orientations" and "personal background". Around 350 people participated in the survey. Unfortunately, a relatively high number of surveys was unusable: many respondents did not answer all questions, others made mistakes in answering the Inglehart-questions which measure someone's value orientation.¹ Finally, 217 surveys were used to build the data set with 156 respondents participating and 59 respondents not participating in the Sharing Economy. Two respondents have not indicated whether or not they are participating.

The target population of the survey were persons; the sampling frame included all persons that could be reached via available means. Those persons that were reached and willing to participate in the data collection are the selected cases or final units. The sampling technique ideally used for this data collection would have been a probability sampling aiming to randomly include members of the population in the sample with all members having equal chances to become part of the sample. However, due to limited time and means, the technique is an opportunity sampling. This type of sampling is based on convenience and includes the people of the targeted population that can be reached and that agree on participating in the study. Although an opportunity sampling has the advantage that it can be conducted in a rather short time, the results are probably biased. In this sample, homogeneity is the primary bias and led to skewed distributions. However, regarding the limited time and means available for this research, limitations and bias in the sample were unavoidable and to

¹ The respondents were asked to choose one first choice and one second choice. Unfortunately, qualtrics did not offer an option to limit respondents' choices to the requirements. Therefore, many of them choose less or more than two answering options, whereby their survey became unusable.

be kept in mind when analyzing and discussing the results. Partly, the skewed distributions even represent “real life distributions”.

In the following, an overview of the main modes of data collection is presented. First, private contacts from the “friends-and family” environment were approached by *e-mail* (older contacts) and by private *WhatsApp* or *Facebook messages* (younger contacts). Almost all approached people confirmed their participation in the survey with a message, wherefore it can be assumed that this mode of data collection was very successful. However, distributing the survey link among private contacts leads to bias: the participants are mainly in the age of the researcher or in the age of the researcher’s parents and the participants potentially share similar social backgrounds and mindsets. While using an e-mail program is today rather common among people of all ages, WhatsApp or Facebook users can be assumed to have a certain affinity and routine of using digital platforms. This opportunity sampling was continued by a *snowball sampling* as e-mail, WhatsApp and Facebook recipients were asked to forward the survey. This mode of data collection is expected to have helped diversifying the sample. However, the stated limitations could occur again. Furthermore, the survey link was posted in several *private and public Facebook groups*. The public groups were mainly groups related to the Sharing Economy in its broader sense (e.g. Free your craft Mainz), wherefore respondents potentially all participate in the Sharing Economy more frequently. Finally, the survey link was posted in *Facebook Survey Exchange groups* and *Reddit*. In survey exchange groups, students post their own surveys and fill out survey of other students on the basis of a “You help me, I help you”-mentality. This mode of data collection was effective to increase the number of respondents but again, respondents are very homogenous with all group members having a similar level of education, a similar age and internet affinity.

3.3. Operationalization of the variables

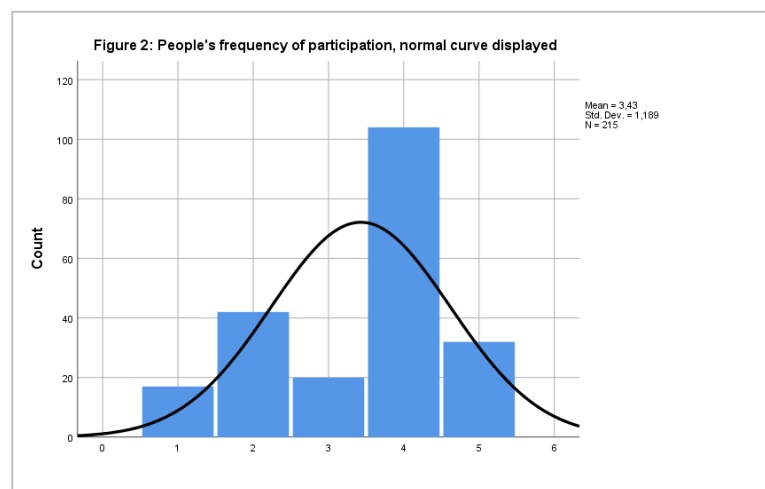
This thesis aims to give an answer to an explanatory research question by the means of a quantitative analysis, wherefore various independent, dependent and control variables are included in the study. In the following, the operationalization of these variables is clarified.

The research question asked in this thesis is split into two sub-questions to allow for a meaningful answer. The main dependent variable “people’s participation in the Sharing Economy” is represented by three variables, one being related to the first sub-question and two being related to the second sub-question. Furthermore, one mediation variable, three independent variables and two control variables are operationalized in this section of the thesis.

The dependent variable “people’s frequency of participation”

The first dependent variable “people’s frequency of participation in the Sharing Economy” is operationalized as an ordinal variable, measured by the question “Which of the following statements describes your frequency of participation in the Sharing Economy best?” in the distributed survey. Answering categories were: (0) “I have never heard of the Sharing Economy”, (1) “I have heard of the Sharing Economy but have never used related digital platforms”, (2) “I have been on one or more of the Sharing Economy platforms and participated once”, (3) “I participate in the Sharing Economy occasionally (once every few months)” and (5) “I participate in the Sharing Economy regularly (at least every month)”. No further recoding was required as a higher value already denotes a more frequent use.

It has to be taken into account that this variable was treated in the analysis as an interval variable, allowing for a linear regression analysis and therefore an easier understandable explanation of the relationship between the independent variables and people’s frequency of



participation in the Sharing Economy. The usual precondition for this approach is the normal distribution of the dependent variable. In this case, the data does not fit the normal curve perfectly (Figure 2) but still well enough to allow for using the originally ordinal variable as an interval variable. However, this limitation has to be kept in mind.

The dependent variables on “people’s motivation for participation”

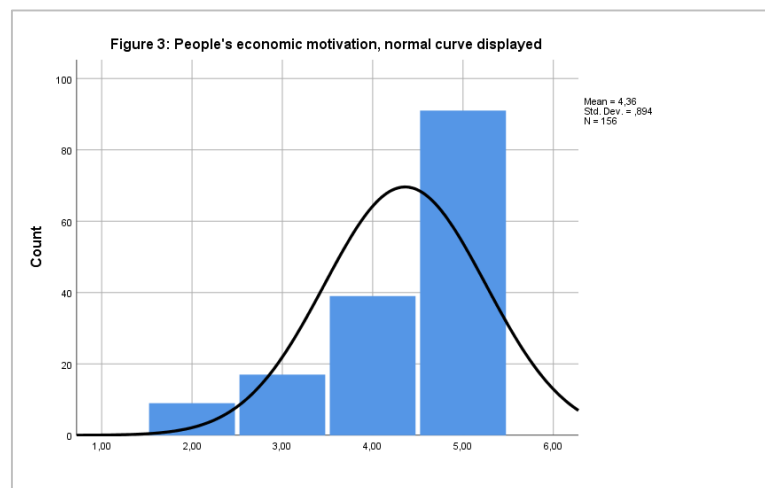
The second dependent variable “people’s motivation for participation in the Sharing Economy” is measured as an ordinal variable with options based on previous scientific findings about why people participate in the Sharing Economy that were presented in a 5-Point-Likert scale ranging from “strongly agree” to “strongly disagree”. The question asked to the respondents was “To what extent do you agree with the following statements regarding your motivation for participation in the Sharing Economy? I participate in the Sharing Economy because...” with the following options to choose from: “...it allows me to save money”, “...I like the social interaction it enhances”, “...I want to avoid buying a good I would only use very seldom”, “...I want to make sure my goods are fully used”, “...I like its character of innovation”, “...it allows me to save money” and “...I like the alternative economy”.

These answering options are categorized in line with the presented literature in three

motivation-variables: firstly, the two answering option “making money” and “saving money” were used to build a variable describing the economic motivation of a respondent. However, a reliability analysis showed that the Cronbach’s alpha is only .295 which is too low². As respondents generally valued “saving money” higher (average value: 4,36) than “making money” (average value: 3,05), the latter variable was removed from the economic category making the variable on economic motivation build up only by the statement on the importance of “saving money”. Secondly, a social motivation variable was built from the answering options on “social interaction”, “innovational character” and “alternative economy” with a Cronbach’s alpha of .67 which is reliable (but questionable). Thirdly, the answering options on “avoid buying” and “full use” were included in an environmental category. For this category, the reliability is rather poor with a Cronbach’s alpha of .552. However, in line with the theoretical context, the variable on environmental motivation is accepted. Originally, and again in line with literature and hypotheses, the social and the environmental motivation variables were planned to be combined into one variable. However, Cronbach’s alpha would have been only .474 and therefore not acceptable.

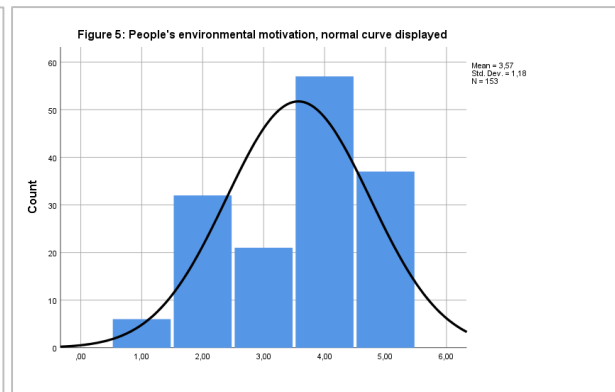
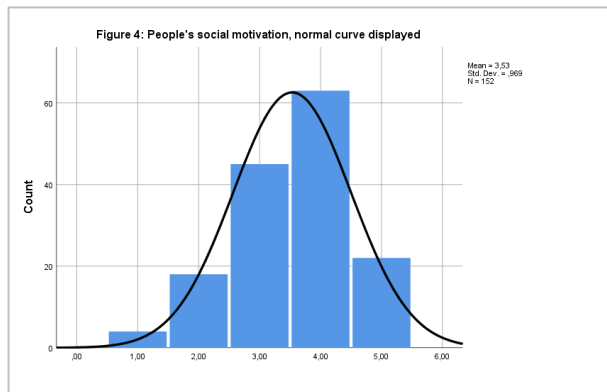
The values of the new variables on social and on environmental motivation are calculated as the average value of the original variables (answering options). All three motivation-variables were recoded to have a range of values from 1 (not economically/socially/environ-mentally motivated at all) to 5 (strongly economically/socially/ environmentally motivated).

Although the three variables are ordinal, they are treated as interval variables to allow for a linear regression analysis. The social motivation variable is very well normally distributed (Figure 4) and the environmental variable is well normally distributed (Figure 5), wherefore they can be treated as



interval variables. Only the economic motivation (Figure 3) is not well normally distributed. However, it is used in this thesis as an interval variable, too.

² Rule of Thumb for Cronbach’s alpha: ≥ 0.9 excellent, ≤ 0.9 good, ≤ 0.8 acceptable, ≤ 0.7 questionable, ≤ 0.6 poor, ≤ 0.5 unacceptable (statisticshowto.com)



The mediation variable “people’s value orientation”

The scientific basis for this thesis is Ronald Inglehart’s theory of value change in which he identifies materialist and post-materialist value orientations as explained in the previous theory section. Therefore, the mediation variable is “people’s value orientation”, ranging from materialist to post-materialist values and measured by Inglehart’s 12-item measurement³ (Inglehart, 1977). This measurement includes three questions each posing four potential answers with two answers indicating materialist values and two answers indicating post-materialist values (Image 1, Appendix). The respondents were asked to indicate a first and a second choice for each question.

To calculate the final variable, the following procedure was applied: in each of the three questions, the eight options were provided with values: *Not chosen: 0, first choice materialist option: 1, second choice materialist option: 2, second choice post-materialist option: 3 and first choice post-materialist option: 4*. Each question was now provided with one of the following values that categorized them on the materialist to post-materialist scale: 3 (*materialist-materialist; 1+2*), 4 (*materialist-post-materialist; 1+3*), 6 (*post-materialist-materialist, 4+2*) and 7 (*post-materialist-post-materialist; 4+3*). Adding up these three values (one per question) allowed for a final result between 9 (only materialist choices) and 21 (only post-materialist choices). This result showed to what extent the respondent was oriented towards materialist or post-materialist values on an ordinal scale: (1) *materialist (values 9, 10, 11)*, (2) *materialist-post-materialist (values 12, 13, 14)*, (3) *post-materialist-materialist (values 16, 17, 18)* and (4) *post-materialist (values 19, 20, 21)*. If the final value was 15, the respondent was as much materialist as post-materialist.

The sample distribution is skewed heavily towards post-materialist value orientations (Figure 10, Appendix). Therefore, the results were categorized into the dummy variable categories materialists (0) and post-materialists (1) with those respondents with a final value of 15 (as much materialist as post-materialist) included in the materialist category.

³ Originally, Inglehart measured people’s value orientation by a 4-item index. As this index is excessively sensitive to short-term forces, he soon proposed a 12-item measurement index.

The independent variable “Age”

“Age” was measured by the question “Please indicate your year of birth”. To cope with the skewed distribution towards respondents younger than 35 years (Figure 11, Appendix), the original interval variable was recoded into a nominal dummy variable, dividing the sample in the two birth groups 1 = “older people” (1938-1983) and 0 = “younger people” (1984-2000).

The independent variable “Level of education”

“Level of education” was measured by the question “What is your level of education? Please select the highest achieved level. If currently enrolled, please select the criteria which fits your enrolment” with the answering categories “no school finished”, “primary school”, “high school”, “vocational training” and “bachelor/master or more”. Here, the sample was highly skewed towards respondents with university education (Figure 12, Appendix). Therefore, the variable was recoded in a nominal dummy variable dividing the sample in the two groups 0 = “vocational training or lower education” and 1 = “university education”.

The independent variable “Urbanity of living area”

“Urbanity of living area” was measured by the question “How would you describe the area you live in?” with the answering categories “rural”, “suburban or small town” and “urban”. Again, a skewed distribution (Figure 13, Appendix) required to recode the original variable into a nominal dummy variable dividing the sample in 0 = “rural, suburban or small town” and 1 = “urban”.

The control variables “Gender” and “Nationality”

Additionally, control variables were included in the research to control for their potential impact on the relationship between the independent variables/the mediation variable and participation in the Sharing Economy and to analyze their effect on the tested relationship. The first control variable is the dummy “Gender” with the two categories 0 = “male” and 1 = “female” (Figure 14, Appendix). A third option “other” was offered in the survey but not chosen by any respondent. The second control variable is “Nationality”, categorized as a dummy variable, too, in 1 = “German” and 0 = “Other” as respondents were mainly German while other nationalities were not meaningfully represented (Figure 15, Appendix).

3.4. Descriptive statistics

Describing the data can be seen as a first step of analysis. However, no data is interpreted. This section is divided in to sub-sections: first, all variables’ frequencies are described. Second, the dependent variables frequency by the groups of the independent variables are presented and described.

3.4.1. Frequencies describing the sample

In this section, the variable's frequencies are presented in numbers of respondents to describe the sample.

Dependent variable: People's frequency of participation

In a sample of $N = 215$, 71,8% of the respondents have participated in the Sharing Economy at least once with most of them (47,9%) participating occasionally. Looking at the 27,2% of respondents which have not participated in the Sharing Economy yet, 19,4% have at least heard of the Sharing Economy. Therefore, the mean value of participation is 3.43 (between "I participated once" and "I participate occasionally") with a standard deviation of 1,189 (Figure 6, Appendix).

Dependent variables: Motivations for participation

83,3% of respondents ($N = 156$) indicated that they participate in the Sharing Economy due to economic motivation, while only 5,8% disagreed with any economic motivation. 10,9% of respondents neither disagreed nor agreed with being economically motivated. Therefore, the mean value for economic motivation is 4,36 (being rather strongly economically motivated) with a standard deviation of .894 (Figure 7, Appendix).

Looking at the social motivation of respondents, 55,9% ($N = 152$) agree with being socially motivated in their participation. 29,6% neither agree nor disagree and 14,5% disagree with being socially motivated. Therefore, the mean value for social motivation is 3,53 (being rather socially motivated) with a standard deviation of .969 (Figure 8, Appendix).

In contrast to these small groups of disagreeing respondents, the group of respondents disagreeing with any environmental motivation is rather large with 24,8% ($N = 153$) indicating that they are not environmentally motivated. Only 13,7% neither agree nor disagree while 61,5% state to participate due to environmental motivation (Figure 9, Appendix).

Mediation variable, independent variables and control variables

As explained in the operationalization, all variables, except the dependent variables, were recoded into dummies due to their skewedness. However, and as presented in the following, the two groups of each variable are still rather different in their sizes.

The distribution of the mediation variable "value distribution" (Figure 10, Appendix) shows that only 27,6% of respondents ($N = 217$) are materialists while 72,4% are post-materialists, wherefore the mean value is .72 with a standard deviation of .448. A similar distribution is observable in the variable on age (Figure 11, Appendix). The share of younger people makes up 64,5% while the share of older respondents is only 35%. Therefore, the mean value is only .34 in a sample of $N = 216$ respondents with a standard deviation of .479.

Looking at the two education groups (Figure 12, Appendix), 78,8% of the respondents (N = 217) follow or followed the university track while only 21,2% of respondents have vocational training or lower education. Therefore, the mean value is .79 with a standard deviation of .41. In terms of the living area (Figure 13, Appendix), the sample is more balanced with 56,7% of respondents (N = 215) indicating to live in an urban area while 42,4% live in a rural or suburban area or in a small town. As a result, the mean is .57 with a standard deviation of .496. The control variable “Gender” (Figure 14, Appendix) is distributed with 40,6% of respondents being male and 58,1% being female. The mean value is .59 with a standard deviation of .493 in a sample of N = 214 respondents. The distribution of the second control variable (Figure 15, Appendix) shows that respondents are mainly German (84,8%) while other nationalities were not meaningfully represented (14,7%). Therefore, the mean is .85 with a standard deviation of .365 in a sample of N = 216 respondents.

3.4.2. Frequencies by people’s value orientation

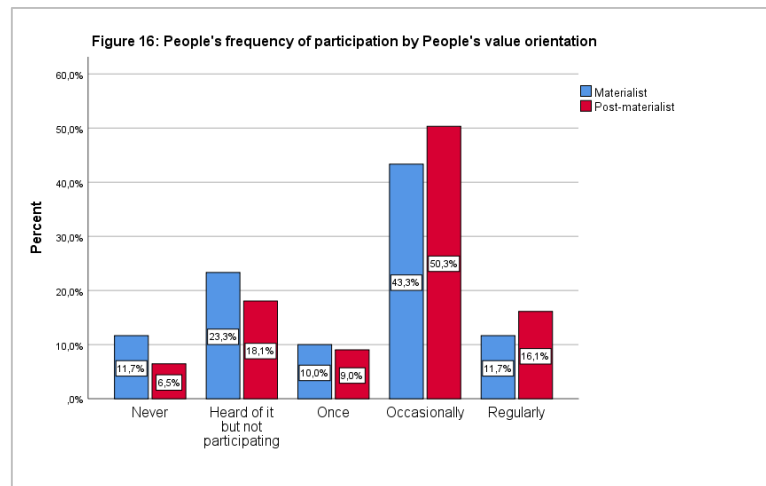
In the following, distributions of the dependent variables under study are presented for materialists and post-materialists. Hereby, first insights in differences between these groups in terms of participation in the Sharing Economy are given.

Frequency of participation in the Sharing Economy by people’s value orientation

Figure 16 presents the distribution of people’s frequency of participation in the Sharing Economy for materialists compared to post-materialists. It shows that not only the major share of post-materialists (66,4%) but

also the major share of materialists (55%) participates in the Sharing Economy occasionally or regularly. Similar shares of each group participated only once (materialists: 10%, post-materialists: 9%).

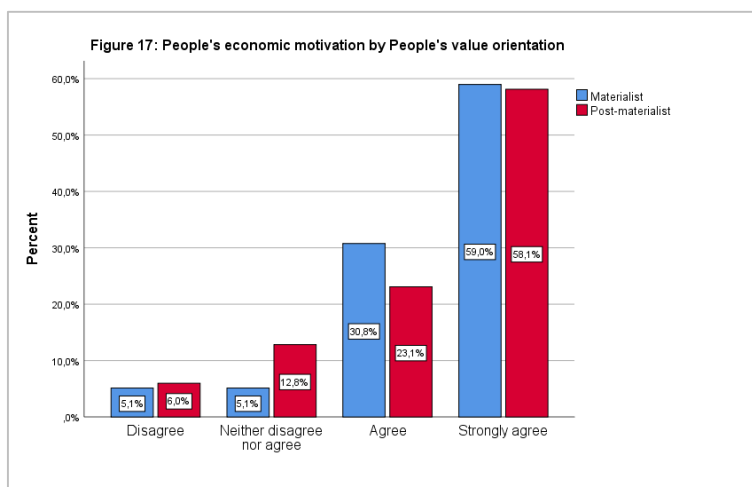
Furthermore, it is interesting to see that a greater share of



materialists (23,3%) than post-materialists (18,1%) heard of the Sharing Economy but is not participating. Also, a greater share of materialists (11,7%) than of post-materialists (6,5%) has never heard of the Sharing Economy.

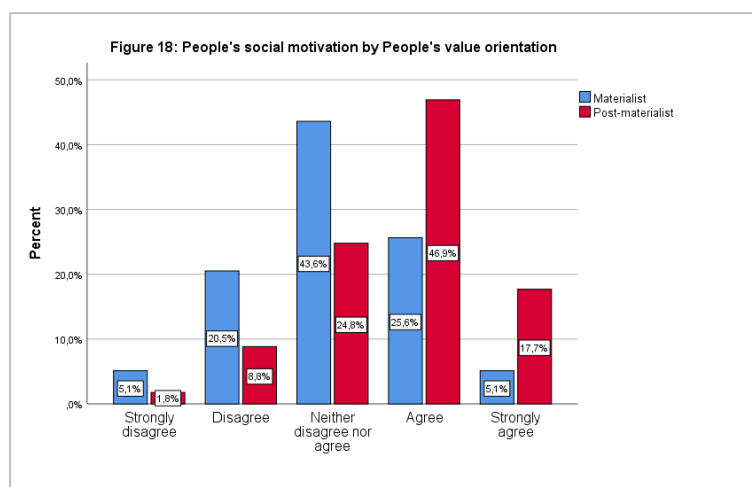
Economic motivation for participation by people's value orientation

Looking at the distribution of Economic motivation for participation in the Sharing Economy (Figure 17), it is striking that the major share of materialists (59%) as well as of post-materialists (58,1%) strongly agree with being economically motivated in their participation. Also, 30% of materialists and 23,1% of post-materialists agrees with being economically motivated. Therefore, very small shares of both groups disagree with this motivation (materialists: 5,1%, post-materialists: 6%) while similar shares neither agree nor disagree (materialists: 5,1%, post-materialists: 12,8%).



Social motivation for participation by people's value orientation

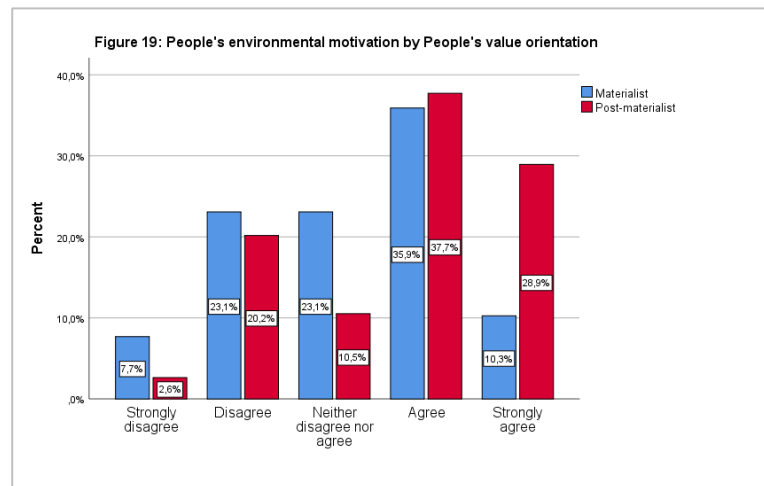
For the social motivation (Figure 18), materialist and post-materialist shares are much more different from each other, with greater shares of materialists disagreeing or neither disagreeing nor agreeing with being socially motivated (69,2%) while greater shares of post-materialists agree with being socially motivated (65,6%). Only 30,7% of materialist respondents are socially motivated compared to 64,6% of post-materialist respondents. Only 10,6% of post-materialists specifically disagree with being socially motivated compared to 25,6% of materialist respondents.



Environmental motivation for participation by people's value orientation

Shares of materialists and post-materialists for environmental motivation for participation in the Sharing Economy (Figure 19) are very similar when it comes to simple disagreement or simple agreement: 23,1% of materialists and 20,2% of post-materialists disagree with being environmentally motivated while 35,9% of materialists and 37,7% of post-materialists agree with being environmentally motivated. Overall, agreement with environmental motivation is greater (materialists: 46,2%, post-materialists: 66,6%) than disagreement (materialists: 30,8%,

post-materialists: 22,8%) for both groups. Greater differences between materialists and post-materialists are presented for strong disagreement, neither agreement nor disagreement (materialists: 23,1%, post-materialists: 10,5%) and strong agreement: it is notable that a much greater share of post-materialists (28,9%) than materialists (10,3%) strongly agrees with being environmentally motivated while a greater share of materialists (7,7%) compared to post-materialists (2,6%) strongly disagrees.



4. Analyses

In this section, the data is analyzed in two steps. For first results, a bivariate analysis is conducted. Therefore, the means of the data are calculated and compared by independent-samples t-tests. This approach suits small samples and describes the relationship between exactly two variables. The main analysis is a multivariate regression analysis which is used to test the hypotheses derived from the section on the theoretical context of this thesis. The advantage of the regression analysis over the t-tests is (1) that multiple variables can be included and (2) that statements about the strengths of effects can be made.

4.1. Bivariate analysis: means and t-tests

In the following, bivariate relationships between one of the independent variables and one of the dependent variables are analyzed. Because they provide meaningful results on relationships including categorical variables, independent-samples t-tests are applied here. A t-test compares two averages, the means, and shows whether or not these means are different from each other. The t-test is not used to test hypotheses but to give first insights in the bivariate relationships under study. To illustrate the findings, graphs are presented.

Three coefficients are interpreted in the bivariate analysis: the *means* give the average value of the dependent variable by the independent variable. The *mean difference* indicates the difference between two groups. The significance is given by the *p-value* which shows the statistical significance of a relationship on the basis of three thresholds that are called alpha-values: 0.1 (90% confidence interval), 0.05 (95% confidence interval) and 0.01 (99% confidence interval). In the case of this bivariate analysis, significances are 2-tailed.

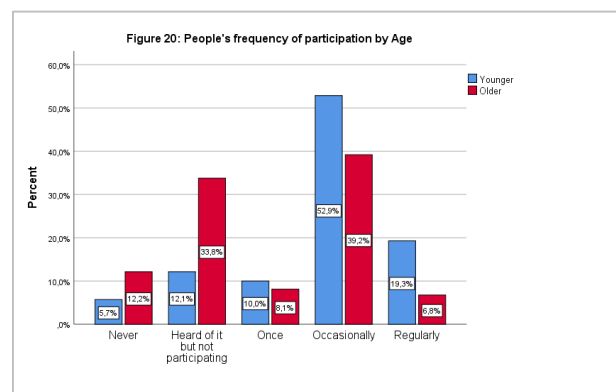
Means of people's frequency of participation in the Sharing Economy

Table 1. People's frequency of participation in the Sharing Economy

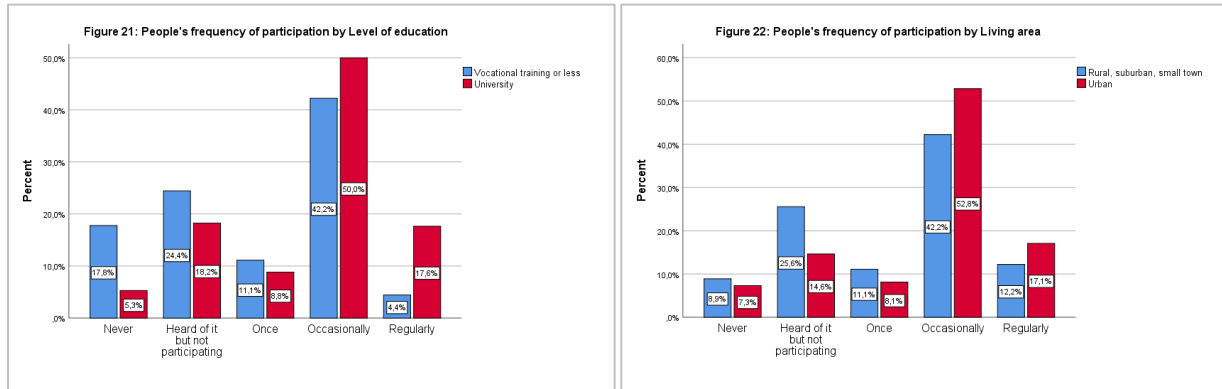
	N	Mean	Std. Deviation	t-value	Mean difference
Value orientation				-1,76	-0,32*
Materialist	60	3,2	1,62		
Post-materialist	155	3,52	1,15		
Age				4,31	0,73***
Younger	140	3,68	1,1		
Older	74	2,95	1,23		
Education				-3,16	-0,65***
Vocational training or less	45	2,91	1,26		
University education	170	3,56	1,14		
Living area				-2,08	-0,34**
Rural and suburban area or small town	90	3,32	1,22		
Urban area	123	3,58	1,15		

Note, compared were the differences between the two groups of the mediation variable and of the independent variables. For the mean difference, the score of the second group was subtracted from the score of the first group.

The first series of t-tests (table 1) is conducted on the relationship between the mediation variable/the independent variables and the dependent variable "People's frequency of participation". The results show that the mean value for materialists is 3,2 while the mean value for post-materialists is 3,52 (with 1 = no participation and 5 = regular participation). The first result of the t-test is as follows: on a 90% significance level, post-materialists participate on a higher frequency compared to materialists with a mean difference of 0,32 (Figure 16, p. 25). Looking at the two age groups (Figure 20), the mean value of participation for younger people is 3,68 while the mean value for older people is only 2,95. On a 99% significance level, older people participate on a lower frequency compared to younger people with a mean difference of 0,73. The mean values for the two education groups (Figure 21) are rather different from each other, too, with people with university education participating on a mean of 3,56 while people with vocational training or less participating on a mean of 2,91. On a 99% significance level, people with university education participate on a higher frequency compared to people with vocational training or lower education with a mean



difference of 0,65. Finally, urban people participate on a mean of 3,58 while non-urban people participate on a mean of 3,32 (Figure 22). On a 95% significance level, urban people participate in the Sharing Economy on a higher frequency compared to people from rural and suburban areas or small towns with a mean difference of 0,344.



Means of people's economic motivation for participation in the Sharing Economy

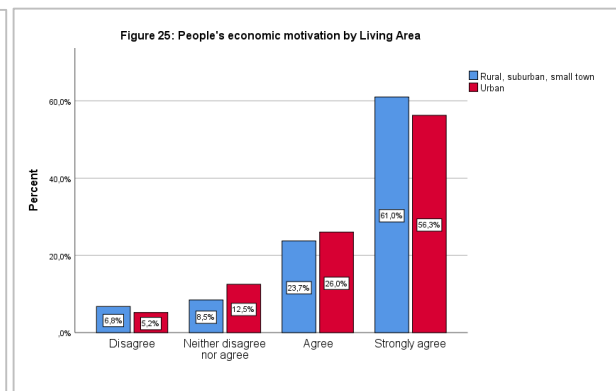
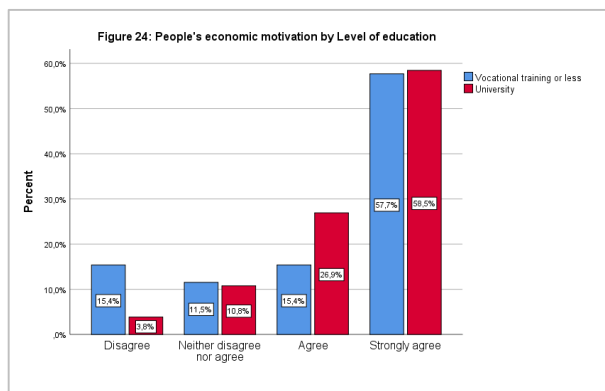
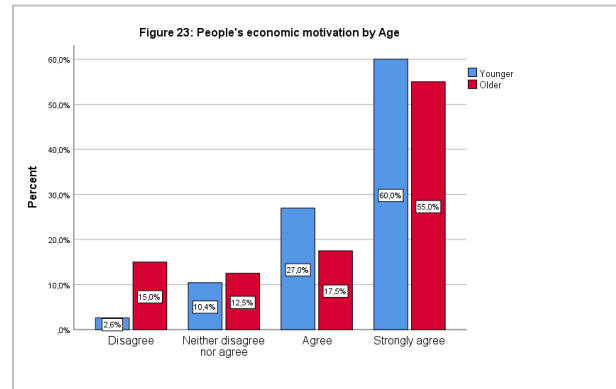
Table 2. People's economic motivation for participation in the Sharing Economy

	N	Mean	Std. Deviation	t-value	Mean difference
Value orientation				0,62	0,10
Materialist	39	4,44	0,82		
Post-materialist	117	4,33	0,92		
Age				1,64	0,32
Younger	115	4,44	0,79		
Older	40	4,12	1,14		
Education				-1,03	-0,25
Vocational training or less	26	4,15	1,16		
University education	130	4,4	0,83		
Living area				0,38	0,06
Rural and suburban area or small town	59	4,39	0,91		
Urban area	96	4,33	0,89		

Note, compared were the differences between the two groups of the mediation variable and of the independent variables. For the mean difference, the score of the second group was subtracted from the score of the first group.

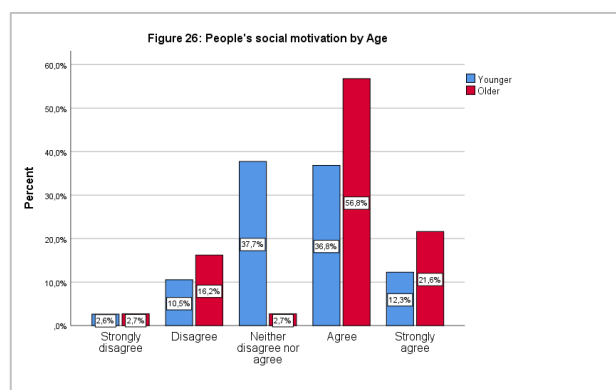
The second series of t-tests (table 2) is conducted on the relationship between the mediation variable/the independent variables and the dependent variable "people's economic motivation". The results show that none of the relationships under study is statistically significant. The mean value for materialists is 4,44 while the mean value for post-materialists

is 4,33 (with 1 = strong disagreement with any economic motivation and 5 = strong agreement with economic motivation) (Figure 17, p. 26). Looking at the two age groups (Figure 23), younger people are economically motivated on a mean of 4,44 while older people are economically motivated on a mean of 4,12. People with university education are economically motivated on a mean of 4,4 while people with vocational training or lower education are economically motivated on a mean of 4,15 (Figure 24). If the results would have been found significant, the findings would contradict the expectations formulated in the hypotheses. However, it is important to keep in mind that they are insignificant. Finally, urban people are economically motivated on a mean of 4,33 while the mean of the non-urban people is 4,39 (Figure 25).



People's social motivation for participation in the Sharing Economy

The third series of t-tests (table 3) is conducted on the relationship between the mediation variable/the independent variables and the dependent variable "people's social motivation". The results show that the mean value for materialists is 3,05 while the mean value for post-materialists is 3,67 (with 1 = strong disagreement with any social motivation and 5 = strong agreement with social motivation). On a 99% significance level, post-materialists agree to a higher extent with being socially motivated compared to materialists with a mean difference of 0,65 (Figure 18, p. 26). The mean value of agreement with social motivation among older people is 3,78 while the mean value among younger people is 3,46 (Figure 26). On a 90% significance level, older people are to a higher



extent socially motivated compared to younger people with a mean difference of 0,33. These means contradict the expectations formulated in the hypotheses. People with a university education agree on an average value of 4,48 with being socially motivated while people with vocational training or lower education agree on an average of 3,81 (Figure 27). However, the relationship is not statistically significant. Also, the difference in means between the two groups of urban (mean = 3,55) and non-urban (mean = 3,5) people is not statistically significant (Figure 28).

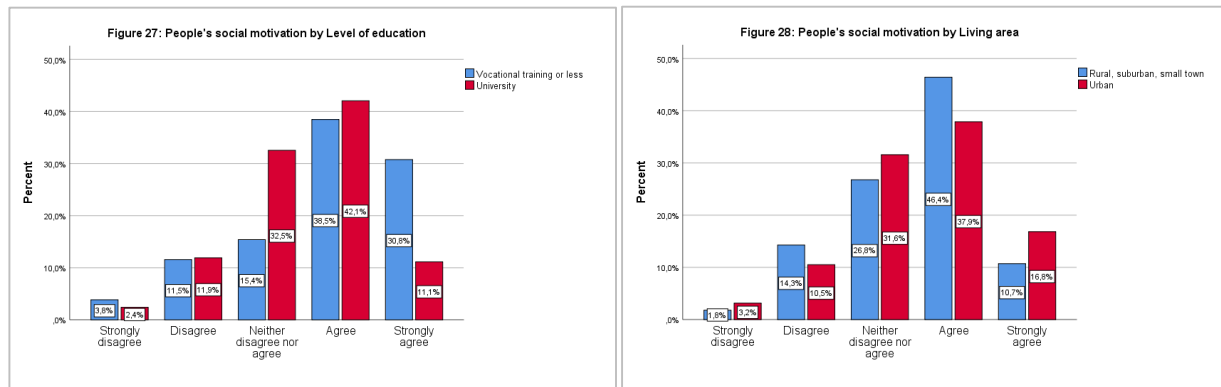


Table 3. People's social motivation for participation in the Sharing Economy

	N	Mean	Std. Deviation	t-value	Mean difference
Value					
orientation				-3,75	-0,65***
Materialist	39	3,05	0,95		
Post-materialist	113	3,67	0,93		
Age				-1,80	-0,33*
Younger	114	3,46	0,93		
Older	37	3,78	1,06		
Education				1,60	0,33
Vocational training or less	26	3,81	1,13		
University education	126	4,48	0,93		
Living area				-0,29	-0,05
Rural and suburban area or small town	56	3,5	0,93		
Urban area	95	3,55	0,10		

Note, compared were the differences between the two groups of the mediation variable and of the independent variables. For the mean difference, the score of the second group was subtracted from the score of the first group.

People's environmental motivation for participation in the Sharing Economy

Table 4. People's environmental motivation for participation in the Sharing Economy

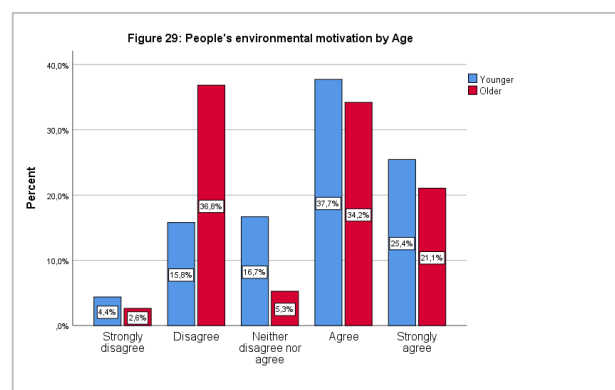
	N	Mean	Std. Deviation	t-value	Mean difference
Value orientation				-2,43	-0,52**
Materialist	39	3,18	1,14		
Post-materialist	114	3,7	1,17		
Age				1,29	0,30
Younger	114	3,64	1,15		
Older	38	3,34	1,26		
Education				0,59	0,15
Vocational training or less	26	3,69	1,23		
University education	127	3,54	1,17		
Living area				-0,22	-0,05
Rural and suburban area or small town	57	3,54	1,31		
Urban area	95	3,59	1,11		

Note, compared were the differences between the two groups of the mediation variable and of the independent variables. For the mean difference, the score of the second group was subtracted from the score of the first group.

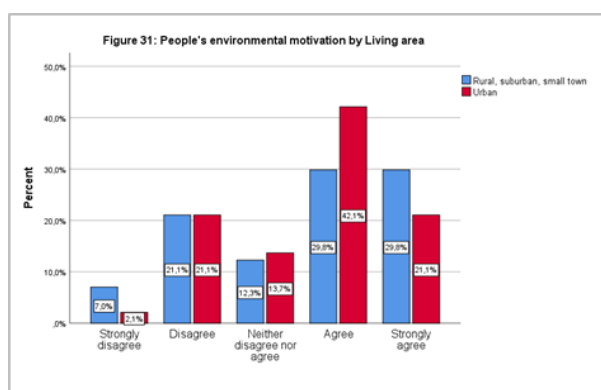
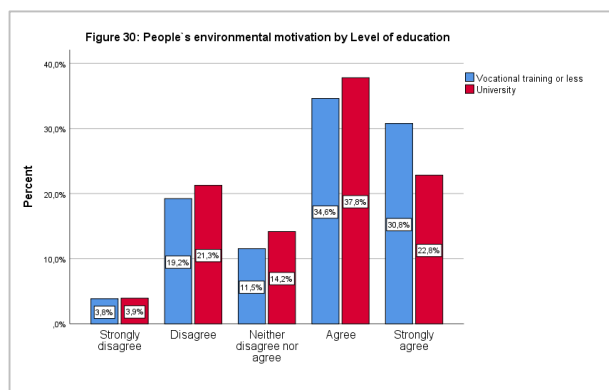
The final series of t-tests (table 4) is conducted on the relationship between the mediation variable/the independent variables and the dependent variable "people's environmental motivation". The results show that the mean value for materialists is 3,18 while the mean value for post-materialists is 3,7 (with 1 = strong disagreement with any environmental motivation and 5 = strong agreement with environmental motivation). On a significance level of 95%, post-materialists agree to a higher extent with being environmentally motivated compared to materialists with a mean difference of 0,52 (Figure 19, p. 27). The three following relationships are statistically insignificant. Younger people

agree with environmental motivation on a mean of 3,64 while older people agree on a mean of 3,34 (Figure 29). Looking at the two education groups, people with university education agree with environmental motivation on a mean of 3,54 while people with vocational training or lower education

agree on a mean of 3,69 (Figure 30). These means contradict the expectations formulated in the hypotheses. However, it is important to keep in mind that they are insignificant. Finally,



urban people agree with environmental motivation on a mean of 3,59 while people from rural and suburban areas or small towns agree on a mean 3,54 (Figure 31).



4.2. Multivariate analysis: regression analysis

In the following, it is tested whether the expected relationships, represented by the hypotheses and the causal diagram, are found in the data. The method of data analysis used for this quantitative research is the testing of hypotheses by a linear regression analysis. This method allows to determine the relative influence of an independent variable. However, it has to be kept in mind that results are always dependent on the quality of the sample, as an incomplete data set may potentially lead to “false” conclusions. To create an overall picture, the results are discussed hypothesis-by-hypothesis. Also, they are presented in two models to allow for an analysis of the mediation effect through the variable “people’s value orientations”: model 1 excludes the mediation variable on people’s value orientations, Model 2 includes it.

The coefficients that are interpreted for accepting or rejecting the hypotheses are the following: the variance of the dependent variable that is explained by the independent variable in percentage is indicated by the coefficient R^2 . To compare models, the *Adjusted R^2* is interpreted. The unstandardized coefficient b describes the change of the dependent variable’s value for each change of the independent variable’s value. The *p-value* shows the statistical significance of a relationship on the basis of three thresholds that are called alpha-values: 0.1 (90% confidence interval), 0.05 (95% confidence interval) and 0.01 (99% confidence interval). If the p-value is below the chosen threshold, the null-hypothesis can be rejected and the relationship is statistically significant.

Before analyzing the hypotheses directly, the coefficient R^2 , or rather the adjusted R^2 , is analyzed here in general to compare model 1 and model 2. Model 1, excluding the variable on people’s value orientation, explains 13% of variance in the dependent variable on people’s frequency of participation in the Sharing Economy while model 2 explains 13,8% of variance (table 5). For the economic motivation, the model fits only very poorly, wherefore not the adjusted but the regular R^2 coefficients are compared (table 5): model 1 explains 3,7% of variance in the dependent variable economic motivation while model 2 explains 3,8% of

variance. Continuing with table 6, the differences between model 1 and model 2 are much larger. Model 1 explains 9,7% of variance in the dependent variable social motivation while model 2 explains 15,5% of variance. For the environmental motivation, model 1 explains 4,9% of variance while model 2 explains 8,6% of variance. Summing up, the models fit the dependent variables rather poorly. Furthermore, model 2 is, although it can explain more of the variances than model 1, not relevant for all hypotheses as the following analyses show.

Based on the results of the regression analysis, hypotheses can be rejected, partly accepted or accepted:

- | | | |
|------------------------|---|---|
| <i>Rejected</i> | → | A hypothesis is rejected in the case the results contradict the expectation formulated in the hypothesis and/or if the results are statistically insignificant |
| <i>Partly accepted</i> | → | A hypothesis is partly accepted in the case more tested relationships support the expectation formulated in the hypothesis than contradict this expectation and/or in the case more results are statistically significant than statistically insignificant. |
| <i>Accepted</i> | → | A hypothesis is accepted in the case the results support the expectation formulated in the hypothesis and if the results are statistically significant. |

The direct effects of people's value orientation (H1a and H1b)

Hypothesis H1a (Table 5) and H1b (Table 5 & 6) focus on the effect of people's value orientation, ranging from materialist to post-materialist, on their participation in the Sharing Economy in terms of frequency and motivation. Only model 2 is relevant as model 1 does not include people's value orientations.

The results of the multivariate analysis (Table 5) show that, holding the conditions constant, people with post-materialist values score 0,27 higher in terms of frequency of participation compared to people with materialist values. However, the relationship is not statistically significant, wherefore *H1a is rejected*.

To test H1b, all three motivation variables are relevant. The results show that, holding the conditions constant, post-materialists score 0,07 lower in economic motivation compared to materialists (Table 5). However, the relationship is not statistically significant. If the result would have been found to be statistically significant, it would support the hypothesis. Looking at the effect of people's value orientations on their social motivation and holding the conditions constant, post-materialists score 0,55 higher compared to materialists (Table 6).

Table 5. Frequency of participation in the Sharing Economy; Economic motivation for participation in the Sharing Economy

<i>Frequency</i>					<i>Economic Motivation</i>			
N	208				152			
	Model 1		Model 2		Model 1		Model 2	
R ²	.15		.163		.037		0,038	
Adjusted R ²	.13		.138		.004		-.001	
	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
<i>Constant</i>	2,98	0,29	2,84	0,30	4,29	0,29	4,32	0,30
<i>Value orientation</i>	.	.	0,27	0,18	.	.	-0,07	0,18
<i>Age</i>	-0,61***	0,16	-0,64***	0,17	-0,29*	0,17	-0,28	0,17
<i>Education</i>	0,43**	0,20	0,42**	0,20	0,25	0,20	0,26	0,20
<i>Living area</i>	0,15	0,16	0,14	0,16	-0,12	0,15	-0,12	0,15
<i>Gender</i>	0,51***	0,16	0,44***	0,16	-0,03	0,15	-0,02	0,16
<i>Nationality</i>	-0,06	0,21	-0,05	0,21	0,03	0,20	0,04	0,20
<i>significant at a *90%, **95%, ***99% level</i>								

Table 6. Social motivation for participation in the Sharing Economy; Environmental motivation for participation in the Sharing Economy

<i>Social Motivation</i>					<i>Environmental Motivation</i>			
N	148				149			
	Model 1		Model 2		Model 1		Model 2	
R ²	.097		.155		.049		.086	
Adjusted R ²	.066		.119		.016		.048	
	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
<i>Constant</i>	3,09	0,30	2,88	0,30	3,67	0,38	3,47	0,38
<i>Value orientation</i>	.	.	0,55***	0,18	.	.	0,54**	0,23
<i>Age</i>	0,27	0,18	0,19	0,18	-0,38*	0,23	-0,46**	0,23
<i>Education</i>	-0,24	0,24	-0,29	0,21	-0,28	0,27	-0,34	0,27
<i>Living area</i>	0,10	0,16	0,06	0,16	0,05	0,20	0,02	0,20
<i>Gender</i>	0,44***	0,16	0,34**	0,16	0,43**	0,20	0,33	0,20
<i>Nationality</i>	0,30	0,21	0,23	0,20	-0,08	0,26	-0,15	0,26

significant at a *90%, **95%, ***99% level

This relationship is statistically significant on a 99% level. Finally, and again holding the conditions constant, post-materialists score 0,54 higher in environmental motivation compared to materialists (Table 6). This relationship is statistically significant, too, on a level of 95%. Summing up, two out of three factors support H1b while one supports it but is statistically insignificant. Therefore, *H1b is partly accepted*.

The direct effects of age (H2a and H2b)

Hypotheses H2a (Table 5) and H2b (Table 5 & 6) represent the expected effect of age on people's participation in the Sharing Economy in terms of frequency and motivation. The hypotheses are developed based on the assumption that older people have more materialist values while younger people have more post-materialist values.

Model 1 shows, in line with Model 2 and holding the conditions constant, that older people score 0,61 lower in terms of frequency of participation compared to younger people (Table 5). The relationship is statistically significant on a 99% level. Therefore, *H2a is accepted*.

For testing H2b, the effects of age on all three motivation variables are relevant. Starting with the economic motivation and holding the conditions constant, older people score 0,29 lower in economic motivation compared to younger people with a significance level of 90% (Table 5). Model 2 presents a similar, slightly decreased, b coefficient but the relationship is now insignificant. This result is contrasting the expectation formulated in H2b. Holding the conditions constant, model 1 furthermore indicates that older people score 0,27 higher in social motivation compared to younger people while model 2 indicates a score of 0,19 (Table 6). However, both models show that the relationships are statistically insignificant. If the results would have been found to be statistically significant, they would support the hypothesis. Continuing with the environmental motivation, and holding the conditions constant, model 1 shows that older people score 0,38 lower compared to younger people with a significance level of 90% (Table 6). Model 2 reports a score of 0,46 with a significance level of 95%. Summing up these findings, *H2b is rejected*.

The direct effects of education (H3a and H3b)

Hypotheses H3a (Table 5) and H3b (Table 5 & 6) describe the expected effect of education on people's participation in the Sharing Economy in terms of frequency and motivation. Hereby, the assumption that people with university education have more post-materialist values, while people with vocational training or lower education have more materialist values (Abramson & Inglehart, 1994) builds the basis.

For H3a (Table 5), holding the conditions constant, model 1 shows that people with university education score 0,43 higher in frequency of participation compared to people with

vocational training or lower education. The relationship is statistically significant on a 95% level and in line with model 2. Therefore, *H3a is accepted*.

The results on H3b are all statistically insignificant. If the results would have been found to be statistically significant, they would all contradict the hypothesis. Starting with the effect of education on people's economic motivation (Table 5), and holding the conditions constant, people with university education score 0,25 higher compared to people with vocational training or lower education. Model 2 presents a stronger effect. Holding the conditions constant, model 1 indicates that people with university education score 0,24 lower in social motivation compared to people with vocational training or lower education (Table 6). Model 2 indicates an increased score of 0,29. Continuing with the environmental motivation (Table 6), and holding the conditions constant, model 1 indicates that people with university education score 0,28 lower in environmental motivation compared to people with vocational training or lower education while model 2 indicates an increased score of 0,34. Summing up these findings, *H3b is rejected*.

The direct effects of the living area (H4a and H4b)

Hypotheses H4a (Table 5) and H4b (Table 5 & 6) represent the expected effect of the living area's urbanity on people's participation in the Sharing Economy in terms of frequency and motivation. It is hereby assumed that people from more rural areas have more materialist values while people from urban areas have more post-materialist values.

For H4a (Table 5), model 1 shows, holding the conditions constant, that people from urban areas score 0,15 higher in frequency of participation compared to people from rural and suburban areas or small towns. Model 2 presents similar results. Because the relationship is statistically insignificant, *H4a is rejected*. If the result would have been found to be statistically significant, it would support the hypothesis.

As for H4a, the results for H4b are statistically insignificant in both models, too. Starting with the effect of people's living area on their economic motivation (Table 5), and holding the conditions constant, model 1 shows that people from urban areas score 0,12 lower compared to people from rural and suburban areas or small towns. The relationship is exactly the same in model 2. If the result would have been found to be statistically significant, it would support the hypothesis. Continuing with the social motivation (Table 6), and holding the conditions constant, model 1 indicates that people from urban areas score 0,1 higher in social motivation compared to people from rural and suburban areas or small towns while model 2 indicates a score of 0,6. If the result would have been found to be statistically significant, it would support the hypothesis. Looking at the environmental motivation (Table 6), and holding the conditions constant, model 1 indicates that people from urban areas score 0,05 higher in environmental motivation compared to people from non-urban areas.

Model 2 indicates a score of 0,03. If the result would have been found to be statistically significant, it would support the hypothesis. Summing up these findings, *H4b is rejected*.

The mediation effects of people's value orientations (H2c, H3c and H4c)

The sets of hypotheses on age, education and living area include, besides the hypotheses on direct effects that are tested in the previous paragraphs, additional mediation hypotheses. These mediation hypotheses explain the previously tested effects by a third variable: people's value orientation towards materialist or post-materialist values. As these value orientations are in the focus of this thesis, the following analysis is much more important for answering the research questions than the analysis of the direct effects of the independent variables under study.

The first step of testing these hypotheses is looking back at the results on H1a and H1b. Hereby, it is shown on which dependent variables the mediation variable actually has a statistically significant effect. For the dependent variable on people's frequency of participation in the Sharing Economy and the dependent variable on people's economic motivation for participation, table 5 only presents insignificant effects of people's value orientation. This means, that people's value orientations do not have a mediation effect on these dependent variables. Therefore, the relationships between the independent variables and frequency of and economic motivation for participation in the Sharing Economy cannot be mediated by this variable. As a result of this, the mediation hypotheses are not supported.

For the dependent variable of people's social motivation (table 6), the effects of age, education and living area are statistically insignificant in both models. As there is no statistically significant relationship which could be mediated by people's value orientations, the mediation hypotheses are again not supported. Looking at the effects on people's environmental motivation (table 6), again, the effects of education and living area on the dependent variable are insignificant in both models. As with people's social motivation, the lack of statistically significant relationships means that no mediation by people's value orientations takes place, whereby the mediation hypotheses are contradicted. In contrast to these analyses, the independent variable age does have a significant effect on environmental motivation in both models, wherefore a closer look on the differences between the two models is required. In line with H2c, it is expected that model 2 presents a decreased effect of age on environmental motivation with a decreased significance. However, table 6 presents an increased effect and an increased significance, wherefore no mediation by people's value orientations can take place. Resulting from this, the mediation hypotheses are contradicted again.

Summing up, no mediation effect by people's value orientations on the relationships between age/education/living area and people's frequency of participation/economic

motivation/social motivation/environmental motivation can be proved. Therefore, the mediation hypotheses *H2c*, *H3c* and *H4c* are rejected.

Summary of the results

To allow for a precise overview of the analysis' results, a table summarizing the hypotheses, the results and short explanations is presented (table 7).

Table 7. Summary of the multivariate analysis testing the hypotheses

Number	Hypothesis	Result	Explanation
H1a	People with stronger materialist values tend to participate in the Sharing Economy on a lower frequency compared to people with stronger post-materialist values who participate on a higher frequency.	<i>Rejected</i>	The hypothesis is supported. However, the results are statistically insignificant.
H1b	People with stronger materialist values tend to participate in the Sharing Economy due to economic reasons while people with stronger post-materialist values tend to participate due to social or environmental reasons.	<i>Partly accepted</i>	The hypothesis is supported. However, only two out of three tested relationships are statistically significant.
H2a	Older people tend to participate in the Sharing Economy on a lower frequency compared to younger people who tend to participate in the Sharing Economy on a higher frequency.	<i>Accepted</i>	The hypothesis is supported. The results are statistically significant.
H2b	Older people tend to participate in the Sharing Economy due to economic motivations while younger people tend to participate in the Sharing Economy due to social or environmental motivations.	<i>Rejected</i>	The expectation that younger people agree more with being environmentally motivated compared to older people is supported. The expectations on economic and social motivation are not supported. The effect on social motivation is statistically insignificant while the other effects are statistically significant.
H2c	The effects of age on frequency of sharing (H2a) and motivations for sharing (H2b) can be explained by older people having more materialist values and younger people having more post-materialist values.	<i>Rejected</i>	The analysis shows that no mediation by people's value orientation takes place.

H3a	People with vocational training or lower education tend to participate in the Sharing Economy on a lower frequency compared to people with university education who tend to participate in the Sharing Economy on a higher frequency.	<i>Accepted</i>	The hypothesis is supported. The results are statistically significant.
H3b	People with vocational training or lower education tend to participate in the Sharing Economy due to economic motivations while people with university education tend to participate in the Sharing Economy due to social or environmental motivations.	<i>Rejected</i>	The results of the regression analysis contradict the hypothesis and are statistically insignificant.
H3c	The effects of education on frequency of sharing (H3a) and motivations for sharing (H3b) can be explained by people with vocational training or lower education having more materialist values and people with university education having more post-materialist values.	<i>Rejected</i>	The analysis shows that no mediation by people's value orientation takes place.
H4a	People from rural and suburban areas or small towns tend to participate in the Sharing Economy on a lower frequency compared to people from urban areas who tend to participate in the Sharing Economy on a higher frequency.	<i>Rejected</i>	The hypothesis is supported. However, the results are statistically insignificant.
H4b	People from rural and suburban areas or small towns tend to participate in the Sharing Economy due to economic motivations while people from urban areas tend to participate in the Sharing Economy due to social or environmental motivations.	<i>Rejected</i>	The hypothesis is supported. However, the results are statistically insignificant.
H4c	The effects of the urbanity of the living area on frequency of sharing (H4a) and motivations for sharing (H4b) can be explained by rural people having more materialist values and urban people having more post-materialist values.	<i>Rejected</i>	The analysis shows that no mediation by people's value orientation takes place.

5. Conclusion

This thesis examined the effect of material and post-material value orientations, as coined by Ronald Inglehart, on people's participation in the Sharing Economy in terms of frequency and motivation. The conclusion summarizes the findings of this research and thereby answers the sub-questions and the main research question as they are stated in the introduction. Additional findings are presented and shortly discussed. Furthermore, concluding remarks shortly discuss practical and theoretical implications of the findings. Throughout the conclusion, recommendations for future research are made.

Answering the research questions

People's materialist or post-materialist value orientations are in the focus of this thesis and therefore subject of the main hypotheses and the research questions. To answer the first sub-question "*To what extent can people's value orientations explain their frequency of participation in the Sharing Economy?*", the effect of people's value orientation (materialist vs. post-materialist) on their frequency of participation in the Sharing Economy was analyzed. The regression analysis shows that post-materialists do participate on a higher frequency than materialists but the effect of people's value orientations is statistically insignificant. However, the bivariate analysis does present a statistically significant mean difference in frequency of participation between the two groups of materialists and post-materialists. This means that including additional variables reduces the relationship's significance. Furthermore, the expectation that people's value orientations mediate the effect of age, education and living area on people's frequency of participation is rejected. As a result of these findings, the first sub-question is answered as follows: people's value orientations can explain their frequency of participation in the Sharing Economy, if at all, to a very limited extent. There is a chance that a larger sample and/or a different model used in the multivariate analysis would increase this extent. For now, it has to be concluded that materialists and post-materialists do not differ in their frequency of participation in the Sharing Economy.

The second sub-question is stated as "*To what extent can people's value orientations explain their motivation for participation in the Sharing Economy?*". To answer this question, a closer look at the three motivation categories is required. First is the economic motivation: independently from their value orientation, the bivariate analysis shows that people on average agree most with being economically motivated in their Sharing Economy participation. Also, the regression analysis does not present any significant effect of people's value orientation on their agreement with economic motivation. This is probably the most important finding of this thesis. Contrarily to the economic motivation, statistically significant effects of people's value orientations on their social and environmental motivation are found.

While materialists as well as post-materialists agree most with economic motivation, post-materialists agree to a significantly higher extent with participating due to social and environmental motivations compared to materialists. Referring back to the mediation hypotheses, people's value orientations do not mediate the effects of age, education or living area on people's motivation for participation. As a result of these findings, the answer to the second sub-question is as follows: people's value orientations explain their motivation for participation in the Sharing Economy to a small extent and differently from how it was expected. Both groups are mainly motivated by economic reasons, which means by the opportunity of saving money. The difference between materialists and post-materialists can be found in their extent of agreement with social and environmental motivation for participation in the Sharing Economy.

Concluding from answering the sub-questions, the main research question "*To what extent do materialist or post-materialist value orientations affect people's participation in the Sharing Economy?*" can be answered as follows: the extent of influence by materialist or post-materialist value orientations on people's participation in the Sharing Economy is very small and limited mainly to social and environmental motivation for participation. This result necessarily leads to the question how well Inglehart's theory on materialist and post-materialist value orientations suits the subject of the Sharing Economy. The high economic motivation of materialists as well as post-materialists and the absent mediation effects of people's value orientations question the general assumptions about the two groups and evoke the idea that, possibly, the theory is outdated. However, such statements have to be made very carefully, as the findings of this thesis are dependent on the quality of the data used for the analysis.

The data used by this thesis was conducted with rather limited time and resources, wherefore qualitative limitations were unavoidable. It is important to reflect on these limitations and to keep them in mind. Regarding the questions stated above, the external validity of the study, which is the extent to which results can be generalized to "the outside world", is important. If a research is applicable to other contexts, e.g. to another sample or setting, its external validity is high. If replication is not possible, external validity is low. Some scholars go so far as to label non-replicable research "pseudo-science" (Popper, 1962) as non-replicable research is not falsifiable. Data for this study was collected worldwide but respondents are mainly from Germany (84,8%) with a minority being citizen of countries mostly comparable to Germany in their level of development (14,7%). Furthermore, the survey used for the data collection was distributed online, wherefore respondents already have a certain level of affinity with the internet and are therefore more likely to participate in online activities such as the Sharing Economy. Representativeness in this study is also an issue with age, education and political orientation, wherefore the sample in general is rather

homogenous. As a result of these limitations in the data, generalizations can be made only with reservation. Whether or not Inglehart's theory suits the subject of the Sharing Economy, and whether or not it is outdated, can be answered only after repeating the research with a different, preferably larger and more heterogeneous sample. For this, probability samplings are recommended.

Another reason for the small explanatory potential of people's value orientations could be the missing information on which Sharing Economy platforms a person is using. The Sharing Economy comprises a great variety of platforms, all being different in their purpose, products and participants, with new platforms emerging constantly. Different platform types address different people (see Böcker & Meelen, 2017), wherefore it could be that materialists tend to use different platforms than post-materialists. A variable on the type of platform used by a person could increase the explanatory potential of people's value orientations and lead to in-depth findings.

Discussion of additional findings

Because no mediation effect of people's value orientations on the effects of age, education or living area on people's frequency of and motivation for participation in the Sharing Economy was found, only findings on direct effects of these variables can be presented and discussed here.

The results show a significant effect of age on frequency of participation in the Sharing Economy with younger people participating more frequently than older people. Referring back to the theoretical context of this thesis, this effect could be explained by older people being less familiar with the internet than younger people and therefore less familiar with the use of the digital platforms that function as the core of the Sharing Economy. This finding leads to the expectation that participation in the Sharing Economy in terms of frequency will increase in the future, provided that younger people continue their participation on the same frequency when they are older. The direct effects of age on the motivation categories show that younger people are more economically and more environmentally motivated than older people. The finding on economic motivation, contrasting the original expectation, could be explained by, for example, younger respondents not having a regular income, wherefore economic factors are more important to them while older respondents could have more financial security (Inglehart's scarcity hypothesis). No statements about the social motivation are made because here, the effect of age is insignificant. The direction the Sharing Economy is developing in is not necessarily limited to one path: while economic motivations could continuously dominate in the future, environmental motivations could increase due to the today younger people being environmentally motivated to a higher extent than older people and due to a generally increasing environmental awareness in society.

People can, and do, as the data show, participate due to various motivations. Motivations could differ between certain types of Sharing Economy platforms or simply overlap as in the case of Airbnb. To forecast, or at least to accompany the development of the Sharing Economy, it is recommended to conduct research concerning inter- and intragenerational change in frequency of and motivation for participation in the Sharing Economy. The preferred method would be a time series. Relating such observations to trends in materialist and post-materialist value orientations could give an answer to the questions stated above on whether or not Inglehart's theory suits the subject of the Sharing Economy and whether or not the theory is outdated. Research on these questions could show that the Sharing Economy does not only challenge the concept of ownership but also value orientations themselves. Therefore, time-series observing changes in people's value orientations throughout their participation in the Sharing Economy are recommended.

The analysis shows that people with university education participate significantly more frequently compared to people with vocational training or lower education. This could be explained by higher educated people living in urban areas where the Sharing Economy is more present or by people with vocational training or lower education having a differing attitude towards ownership. Including survey questions on people's attitude towards ownership is recommended for when this research is repeated. Increasing numbers of people with university education could lead to increasing numbers of people that participate in the Sharing Economy on a higher frequency. Looking at the motivations for participation, no statistically significant effect of education is shown by the analysis' results, wherefore no final findings can be discussed. To explain the effect of education on people's frequency of participation, their social background as a precondition for their education could be of interest (Abramson & Inglehart, 1994), wherefore it is recommended for future research to include a variable on people's social background to clarify whether education itself affects people's participation in the Sharing Economy (see Stubager, 2008) or if it is actually the social background which affects this participation. Such research would also be interesting to deepen the research on materialist and post-materialist value orientations as it could present more meaningful results than an independent education variable. Furthermore, it is recommended for future research to generally examine the differences between educational groups and their participation in the Sharing Economy in greater depth to see whether the Sharing Economy is a phenomenon primarily for the people with university education and if yes, why this is the case and how the Sharing Economy could cater to people with vocational training or lower education.

Finally, the direct effects of the living area are not statistically significant, wherefore this thesis cannot give any final results or interpretations on differences in Sharing Economy participation between people from urban areas and people from rural and suburban areas or

small towns. An exception is the statistically significant mean difference in frequency of participation in the Sharing Economy. This difference could be explained in line with the theoretical context which argues that the Sharing Economy is an urban phenomenon. Because of the strong theoretical context arguing that the Sharing Economy is an urban phenomenon, the insignificant effects of people's living area surprise. It is therefore suggested to dedicate research on rural-urban differences in Sharing Economy participation. As many Sharing Economy platforms pose answers to urban problems or are enabled by urban conditions (see Davidson & Infranca, 2016), meaningful results could be obtained by including the type of Sharing Economy platform in the analysis. It is expected that people from urban areas use different platforms than people from non-urban areas.

For future research, it is recommended to use the control variable gender as an independent variable, and therefore as a basis for hypotheses, as the regression analysis showed statistical significant differences between the groups male and female in their frequency of participation in the Sharing Economy and their agreement with being socially motivated in this participation. Such research would be in line with Böcker and Meelen's (2017) finding that women are more environmentally driven and Hellwig et al.'s (2015) observation of a female overrepresentation in the group of intrinsically motivated sharing idealists.

Concluding remarks

This study was conducted with rather limited time and resources, wherefore it should be seen primarily as a first approach to include scientific theory in the Sharing Economy discourse and not as a definitive answer on the role of materialist and post-materialist value orientations in the Sharing Economy.

The answers to the research questions show that the application of Inglehart's materialist and post-materialist value orientations on the Sharing Economy participation is not as clear and suitable as expected. Participation in the Sharing Economy as well as value orientations and motivations are more complex. Contrarily to what was expected, simply dividing a society in materialists and post-materialists cannot answer the question on the Sharing Economy's future direction finally. The most striking finding of the bivariate analysis is that all respondents, independently from their value orientation, age, education and living area, agree most and strongly with being economically motivated. This shows that the Sharing Economy is, concluding from this thesis' sample to the whole of Sharing Economy participants, primarily an economic phenomenon. The increasing number of Sharing Economy platforms shows that a change in people's attitude towards ownership is underway. Taking a closer look at the types of platforms would show whether they are in fact creating alternatives to ownership or whether they are merely enabling series of ownerships ("second

hand"). The high economic motivation questions the extent of post-materialist value orientations among the younger shares of the society. Are materialist and post-materialist value orientations actually differing in their attitude towards ownership to an extent as high as assumed? Or is it today perhaps possible to be post-materialist and to attach high importance to economic security at the same time? Future research on this approach is highly recommended to "update" and to develop Inglehart's theory and to generate in-depth knowledge about people's value orientations in societies that are using the internet as one central platform to organize every-day life around.

Respondents, in average, also rather agree with being socially and environmentally motivated, with post-materialists agreeing to a higher extent than materialists. Therefore, a picture with different layers is drawn which shows that the direction the Sharing Economy is heading in is still not clear and, from a perspective of sustainable development, the danger persists that social and environmental potentials of the Sharing Economy are ousted in the long-term. However, economic motivation in the context of this thesis is not necessarily an indicator for the Sharing Economy to be a "nightmarish form of neoliberal capitalism", as Martin (2015) puts it. Also, economic motivation and social or environmental motivations do not exclude each other. In fact, having this in-depth knowledge allows to create platforms that attract with economic as well as with social or environmental aspects and thereby provide a comprehensive and attractive alternative to traditional capitalist economies. Aim-oriented campaigns and support from the side of institutions and governments would help to outline a sustainable path for the Sharing Economy. To support such steps scientifically, it is recommended for future research not to ignore the high extent to which people agree with economic motivations for participation in the Sharing Economy but to put effort in research on how economic and social or economic and environmental motivations can be combined with the aim of creating a sustainable alternative to traditional capitalist systems.

6. References

- Abramson, P. R. & Inglehart, R (1994). Education, Security, and Postmaterialism: A Comment on Duch and Taylor's "Postmaterialism and the Economic Condition". *American Journal of Political Science*, 38(3), 797-814. doi:10.2307/2111607
- Albinsson, P. A. & Perera, B. Y. (2012). Alternative marketplaces in the 21st century: Building community through sharing events. *Journal of Consumer Behaviour*, 11(4), 303-315. <https://doi.org/10.1002/cb.1389>
- Albinsson, P. A., Wolf, M. & Kopf, D. (2010). Anti-consumption in East Germany: Consumer resistance to hyperconsumption. *Journal of Consumer Behaviour*, 9(6), 412-425. <https://doi.org/10.1002/cb.333>
- Balck, B. & Cracau, D. (2015). Empirical analysis of customer motives in the shareconomy: a cross-sectoral comparison (FEMM Working Papers 150002). Otto-von-Guericke University Magdeburg, Faculty of Economics and Management.
- Balkin, J. M. (1987). Deconstructive Practice and Legal Theory. *The Yale Law Journal*, 96(4), 743-786. <https://doi.org/10.2307/796361>
- Bardhi, F., & Eckhardt, G. M. (2012). Access-based consumption: The case of car sharing. *Journal of Consumer Research*, 39(4), 881-898. <https://doi.org/10.1086/666376>
- Baumeister, C., & Wangenheim, F. V. (2014). Access vs. Ownership: Understanding Consumers' Consumption Mode Preference. *SSRN Electronic Journal*. doi:10.2139/ssrn.2463076
- Belk, R. (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(2), 139-168. <https://doi.org/10.1086/209154>
- Belk, R. (2007). Why not share rather than own? *The Annals of the American Academy of Political and Social Science*, 611(1), 126-140. <https://doi.org/10.1177/0002716206298483>
- Belk, R. (2014a). You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, 67(8), 1595-1600. <https://doi.org/10.1016/j.jbusres.2013.10.001>
- Belk, R. (2014b). Sharing versus pseudo-sharing in web 2.0. *The Anthropologist*, 18(1), 7-23. <https://doi.org/10.1080/09720073.2014.11891518>
- 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. *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems -CHI15*. <https://doi.org/10.1145/2702123.2702272>
- Bilsky, W. & Schwartz, S. H. (1994). Values and personality. *European Journal of Personality*, 8(3), 163-181. <https://doi.org/10.1002/per.2410080303>

- Black, I. R. and Cherrier, H. (2010). Anti-consumption as part of living a sustainable lifestyle: daily practices, contextual motivations and subjective values. *Journal of Consumer Behaviour* 9(6),437–453. <https://doi.org/10.1002/cb.337>
- Böcker, L. & Meelen, T. (2017). Sharing for people, planet or profit? Analysing motivations for intended sharing economy participation. *Environmental Innovation and Societal Transitions*, 23, 28-39. <https://doi.org/10.1016/j.eist.2016.09.004>
- Botsman, R. (2013, 21 November). The Sharing Economy Lacks A Shared Definition. Fast Company. Retrieved from <https://www.fastcompany.com/3022028/the-sharing-economy-lacks-a-shared-definition>
- Botsman, R., & Rogers, R. (2011). *What's mine is yours: How collaborative consumption is changing the way we live*. New York, NY: Collins.
- Brooks, C. (2006). Voters, Satisficing, and Policymaking: Recent Directions in the Study of Electoral Politics'. *Annual Review of Sociology* 32(1), 191–211. <https://10.1146/annurev.soc.32.061604.123142>
- Carlson, E. & Goss, J. (2016). The State of the Urban/Rural Digital Divide. Retrieved from <https://www.ntia.doc.gov/blog/2016/state-urbanrural-digital-divide>
- Codagnone, C., & Martens, B. (2016). Scoping the Sharing Economy: Origins, Definitions, Impact and Regulatory Issues. Institute for Prospective Technological Studies Digital Economy Working Paper 2016/01, JRC100369
- Cronbach's Alpha: Simple Definition, Use and Interpretation (2014). Retrieved from <http://www.statisticshowto.com/cronbachs-alpha-spss/>
- Davidson, N. M. and Infranca, J. J. (2016). The Sharing Economy as an Urban Phenomenon. *Yale Law & Policy Review* 34(2)
- Dillman, D. A. and Tremblay, K. R. (1977). The Quality of Life in Rural America. *The Annals of the American Academy of Political and Social Science* 429(1), 115-129. <https://doi.org/10.1177/000271627742900111>
- Durkheim, E. (1964). The division of labor in society. New York, NY: Free Press of Glencoe.
- Elkington, J. (1997). Cannibals with forks. The triple bottom line of 21st century. *Journal of Business Ethics* 23(2), 229-231. <https://doi.org/10.1023/A:1006129603978>
- Eritrea internet users (2016). <http://www.internetlivestats.com/internet-users/eritrea/>
- Etzioni, A. (1996). Positive Aspects of Community and the Dangers of Fragmentation. *Development and Change* 27(2): 301–314. <https://doi.org/10.1111/j.1467-7660.1996.tb00591.x>
- Fisher, C. S. (1972). Urbanism as a Way of Life: A Review and an Agenda. *Sociological Methods and Research* 1(2), 187-242. <https://doi.org/10.1177/004912417200100203>
- Frenken, K., Meelen, T., Arets, M., & van de Glind, P. (2015, 20 May). Smarter regulation for the sharing economy, The Guardian. Retrieved from

- <http://www.theguardian.com/science/political-science/2015/may/20/smarter-regulation-for-the-sharing-economy>
- Freudenburg, W. R. & McGinn, B. (1987). Rural-Urban Differences in Environmental Concern: Closer Look. *Sociological Inquiry* 61(2), 167-198.
<https://doi.org/10.1111/j.1475-682X.1991.tb00274.x>
- Freudenburg, W. R. (1986). The Density of Acquaintanceship: An Overlooked Variable in Community Research? *American Journal of Sociology* 92(1), 27-63.
<https://doi.org/10.1086/228462>
- Gansky, L. (2010). The mesh: Why the future of business is sharing. New York, NY: Penguin.
- Glaeser, E. L. and Gottlieb, J. D. (2009). The wealth of cities: agglomeration economies and spatial equilibrium in the United States (Working Paper No. 14806). The National Bureau of Economic Research.
- Grosman, S. J. & Hart, O. D. (1986). The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration. *Journal of Political Economy* 94(4): 691-719.
<https://doi.org/10.1086/261404>
- Gusfield, J. R. (1975). Community: A critical response. New York, NY: Harper, Colophon.
- 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*, 67(9), 2047-2059. <https://doi.org/10.1002/asi.23552>
- Heinrichs, H. (2013). Sharing economy: a potential new pathway to sustainability. *GAIA Ecological Perspectives for Science and Society*, 22(4), 228-231.
<https://doi.org/10.14512/gaia.22.4.5>
- Held, M., Müller, J., Deutsch, F., Grzechnik, E. & Welzel, C. (2009). Value Structure and Dimensions. Empirical Evidence from the German World Values Survey. *World Values Research*, 2(3), 55-76.
- 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. <https://doi.org/10.1002/mar.20825>
- Inglehart, R. (1971). The Silent Revolution in Europe: Intergenerational Change in Post-industrial Societies. *The American Political Science Review*, 65(4), 991-1017. <https://doi.org/10.2307/1953494>
- Inglehart, R. (1977). The silent revolution. Changing values and political styles among Western Publics. Princeton University Press.
- Inglehart, R. (2000). Globalization and Post-modern values. *The Washington Quarterly* 23(1), 215-228. <https://doi.org/10.1162/016366000560665>

- Inglehart, R. (2008). Changing Values among Western Publics from 1970 to 2006. *West European Politics*, 31(1-2), 130-146. <https://doi.org/10.1080/01402380701834747>
- Kreiczer-Levy, S. (2016). Consumption Property in the Sharing Economy. *Pepperdine Law Review*.
- Lamberton, C., & Rose, R. (2012). When Is Ours Better Than Mine? A Framework for Understanding and Altering Participation in Commercial Sharing Systems. *Journal of Marketing*, 76(4), 109-125. <https://doi.org/10.2139/ssrn.1939289>
- Lowe, G. D. & Pinhey, T. K. (1982). Rural-Urban Differences in Support for Environmental Protection. *Rural Sociology*, 47(1), 114-128.
- Martin, C. J. (2015). The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism? *Ecological Economies*, 121, 149-159. <https://doi.org/10.1016/j.ecolecon.2015.11.027>
- Martin, C. J., & Upham, P. (2015). Grassroots social innovation and the mobilisation of values in collaborative consumption: a conceptual model. *Journal of Cleaner Production*, 134(A), 204-213. <https://doi.org/10.1016/j.jclepro.2015.04.062>
- Maslow, A. (1943). A Theory of Human Motivation. *Psychological Review*, 50(4), 370-396. doi:10.1037/h0054346
- Möhlmann, M. (2015). Collaborative consumption: determinants of satisfaction and the likelihood of using a sharing economy option again. *Journal of Consumer Behaviour*, 14(3), 193-207. <https://doi.org/10.1002/cb.1512>
- Norris, P. (2000). Global governance and cosmopolitan citizens. *Global Society*, 20(3), 287-305. <https://doi.org/10.1080/13600820600816282>
- Ozanne, L., & Ballantine, P. (2010). Sharing as a form of anti-consumption? An examination of toy library users. *Journal of Consumer Behaviour*, 9(6), 485-498. <https://doi.org/10.1002/cb.334>
- Piscicelli, L., Cooper, T., & Fisher, T. (2014). The role of values in collaborative consumption: Insights from a product-service system for lending and borrowing in the UK. *Journal of Cleaner Production*, 97, 21-29. <https://doi.org/10.1016/j.jclepro.2014.07.032>
- Popper, K. (1962). Conjectures and refutations. The growth of scientific knowledge. Routledge.
- Price, J. A. (1975). Sharing: The integration of intimate economies. *Anthropologica*, 17(1), 3-27. <https://doi.org/10.2307/25604933>
- Putnam, R. D. (2000). Bowling Alone. The collapse and revival of American community. New York, NY: Simon and Schuster.
- Roccas, S., Sagiv, L., Schwartz, S. H. & Knafo, A. (2002). The Big Five Personality Factors and Personal Values. *Personality and Social Psychology Bulletin*, 28(6), 789-801. 10.1177/0146167202289008

- Rohan, M. J. (2000). A rose by any name? The values construct. *Personality and Social Psychology Review*, 4(3), 255-277. https://doi.org/10.1207/S15327957PSPR0403_4
- Sandikci, Ö. & Ekici, A. (2009). Political motivated brand rejection. *Journal of Business Research* 62(2): 208–217. <https://doi.org/10.1016/j.jbusres.2008.01.028>
- Schleife, K. (2008). Empirical Analyses of the Digital Divide in Germany. Age-specific and Regional Aspects (Doctoral dissertation). Retrieved from <http://tuprints.ulb.tu-darmstadt.de/1086/>
- Schor, J. (2014). Debating the Sharing Economy: Great Transformation Initiative. Retrieved from <http://greattransition.org/publication/debating-the-sharing-economy>
- Schor, J. B. (2011). A Plenitude Economy. Available at www.newdream.org
- Schor, J., & Fitzmaurice, C. (2015). Collaborating and Connecting: The emergence of the sharing economy. *Handbook of Research on Sustainable Consumption* (pp. 410-425). Cheltenham, UK: Edward Elgar.
- Share of internet users in Germany from 2001 to 2017 (2018). Retrieved from <https://www.statista.com/statistics/380514/internet-usage-rate-germany/>
- Sheth, J. N., Sethia, N. K. & Srinivas, S. (2011). Mindful consumption: A customer-centric approach to sustainability. *Journal of the Academy of Marketing Science*, 39(1), 21–39. <https://doi.org/10.1007/s11747-010-0216-3>
- Stephany, A. (2015). *The Business of Sharing: Making It in the New Sharing Economy*. New York, NY: Palgrave Macmillan.
- Stubager, R. (2008). Education effects on authoritarian–libertarian values: a question of socialization. *The British Journal of Sociology*, 59(2), 327-350. <https://doi.org/10.1111/j.1468-4446.2008.00196.x>
- Tussyadiah, I. P. (2015). An exploratory study on drivers and deterrents of collaborative consumption in travel. In I. Tussyadiah, & A. Inversini (Eds.), *Information & communication technologies in tourism 2015*, 917-830. Lugano, Switzerland: Springer International Publishing.
- Tussyadiah, I. P., & Pesonen, J. (2015). Impacts of peer-to-peer accommodation use on travel patterns. *Journal of Travel Research*, 55(8), 1022-1040. <https://doi.org/10.1177/0047287515608505>
- United States internet users (2016). <http://www.internetlivestats.com/internet-users/us/>
- Van Liere, K. D. & Dunlap, R. E. (1980). The Social Bases of Environmental Concern: A Review of Hypotheses, Explanations and Empirical Evidence. *The Public Opinion Quarterly*, 44(2), 181-197. <https://doi.org/10.1086/268583>
- Walsh, B. (2011). Today's smart choice: Don't own. Share. Retrieved from http://content.time.com/time/specials/packages/article/0,28804,2059521_2059717_2059710,00.html

7. Data Appendix

- V69. People sometimes talk about what the aims of this country should be for the next ten years. On this card are listed some of the goals which different people would give top priority. Would you please say which one of these you, yourself, consider the most important? (*Code one answer only under "first choice"*):
- V70. And which would be the next most important? (*Code one answer only under "second choice"*):

	V69	V70
	First choice	Second choice
A high level of economic growth	1	1
Making sure this country has strong defense forces	2	2
Seeing that people have more say about how things are done at their jobs and in their communities	3	3
Trying to make our cities and countryside more beautiful	4	4

- V71. If you had to choose, which one of the things on this card would you say is most important?
- V72. And which would be the next most important? (*Code one answer only under "second choice"*):

	V71	V72
	First choice	Second choice
Maintaining order in the nation	1	1
Giving people more say in important government decisions	2	2
Fighting rising prices	3	3
Protecting freedom of speech	4	4

- V73. Here is another list. In your opinion, which one of these is most important? (*Code one answer only under "first choice"*):
- V74. And what would be the next most important? (*Code one answer only under "second choice"*):

	V73	V74
	First choice	Second choice
A stable economy	1	1
Progress toward a less impersonal and more humane society	2	2
Progress toward a society in which Ideas count more than money	3	3
The fight against crime	4	4

Image 1. Inglehart's 12-index measurement (Held et al., 2009)

Figure 6: People's frequency of participation

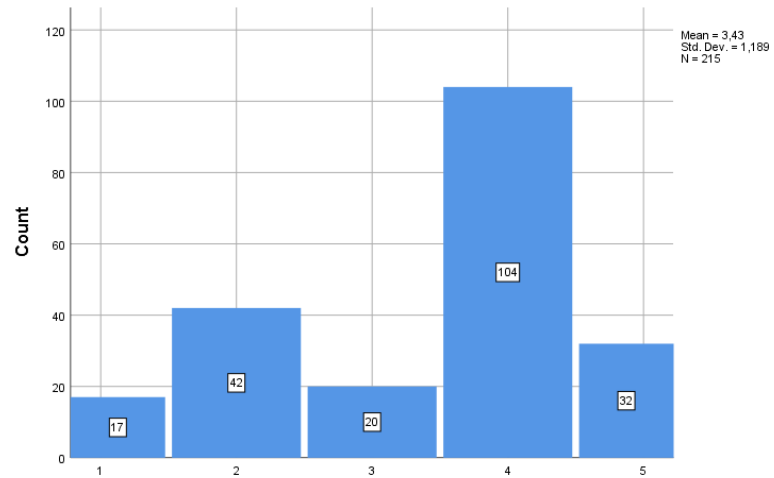


Figure 7: People's economic motivation

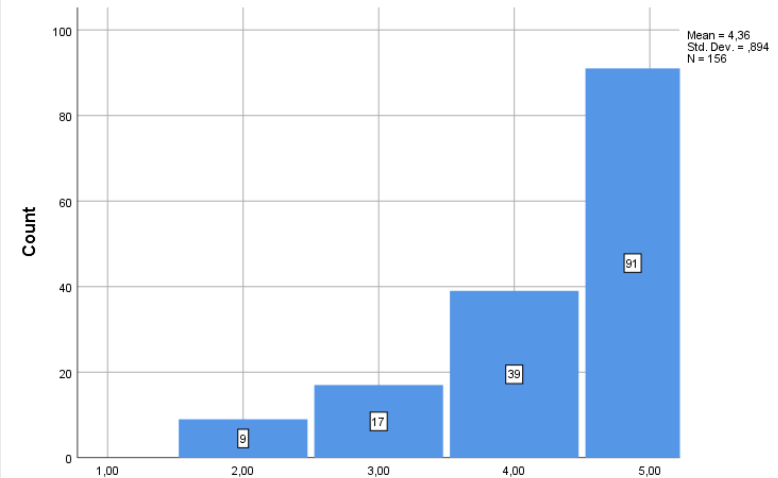


Figure 8: People's social motivation

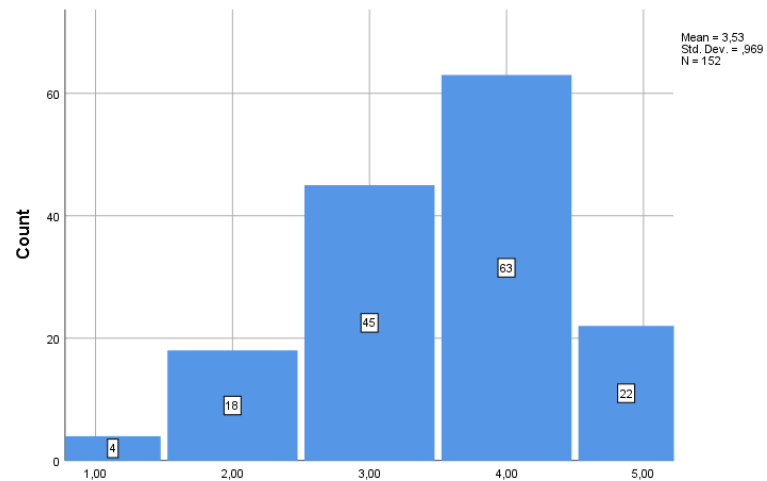
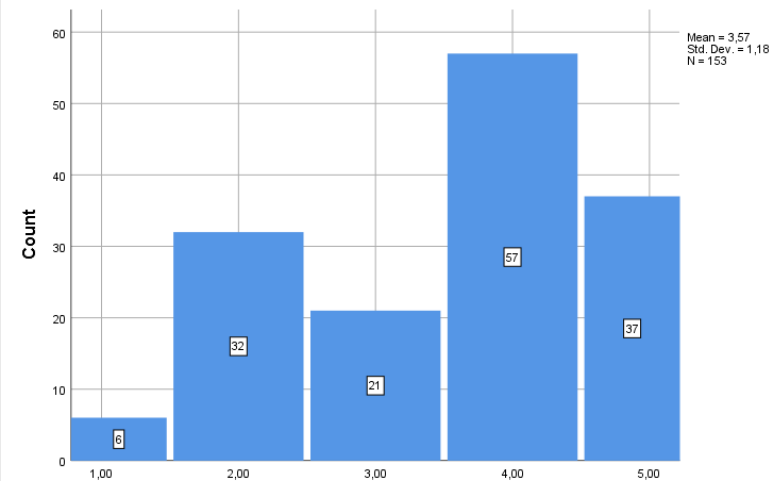
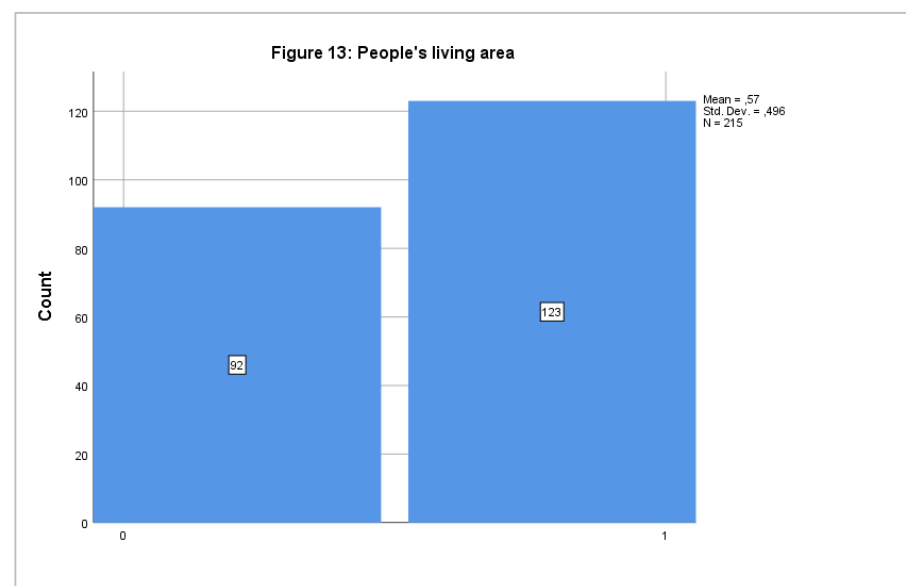
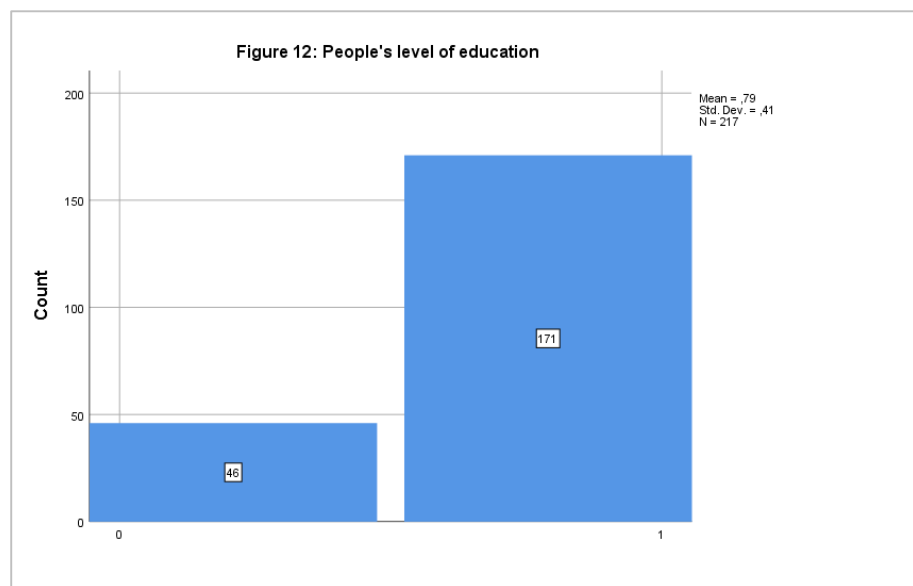
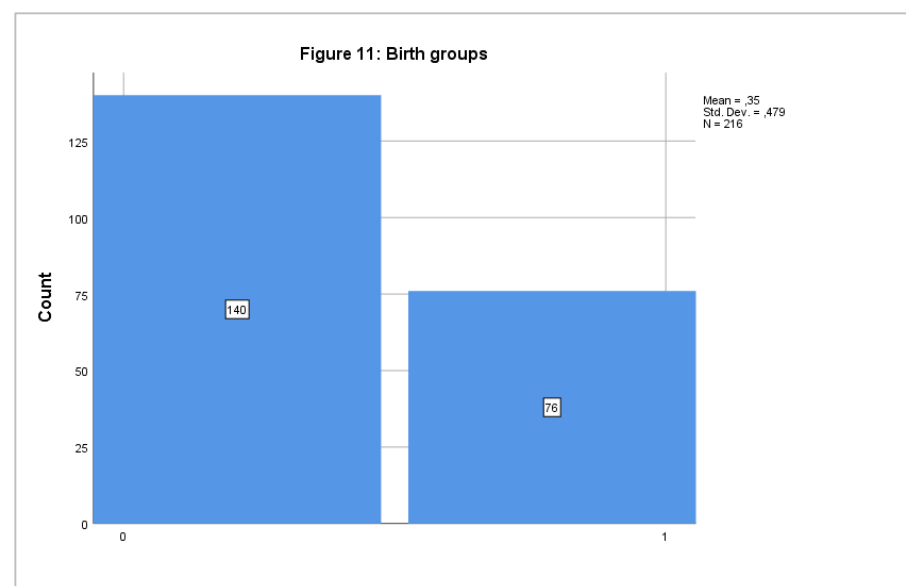
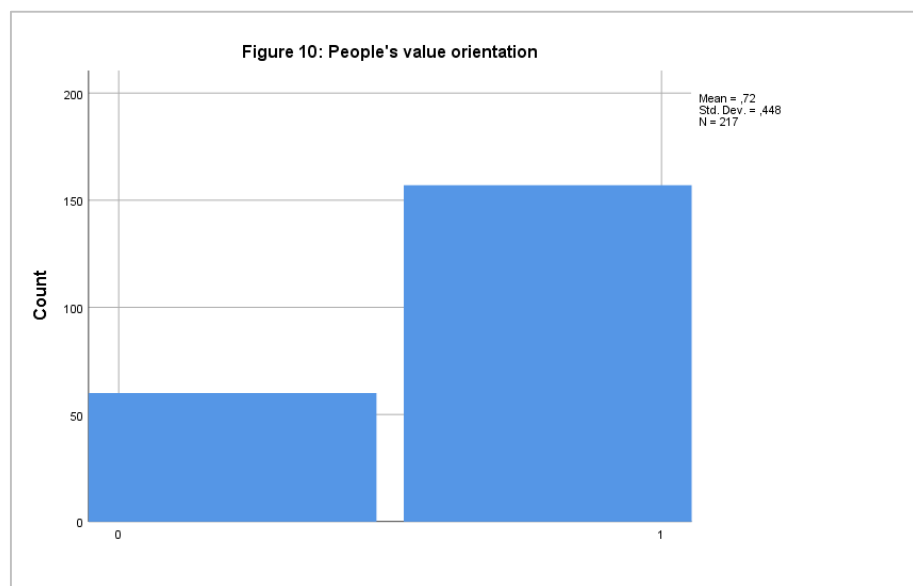
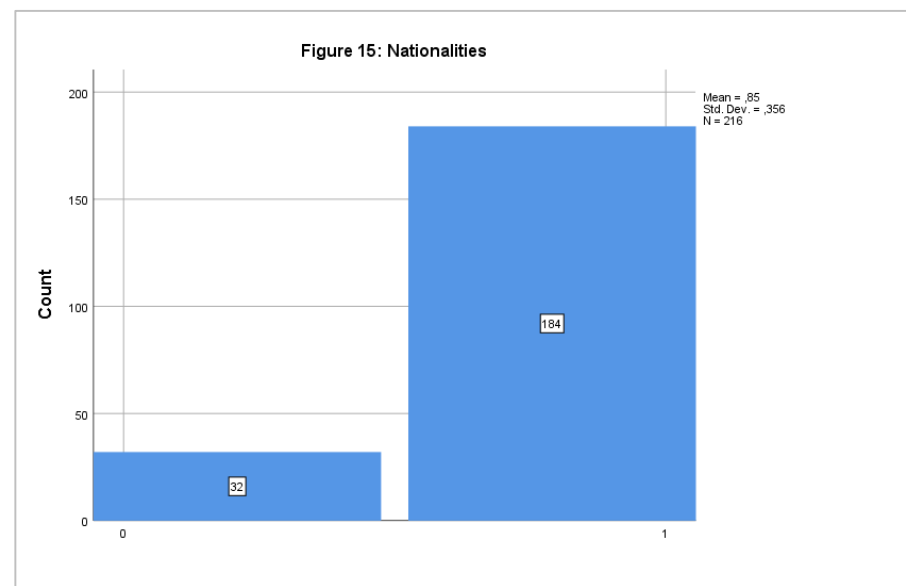
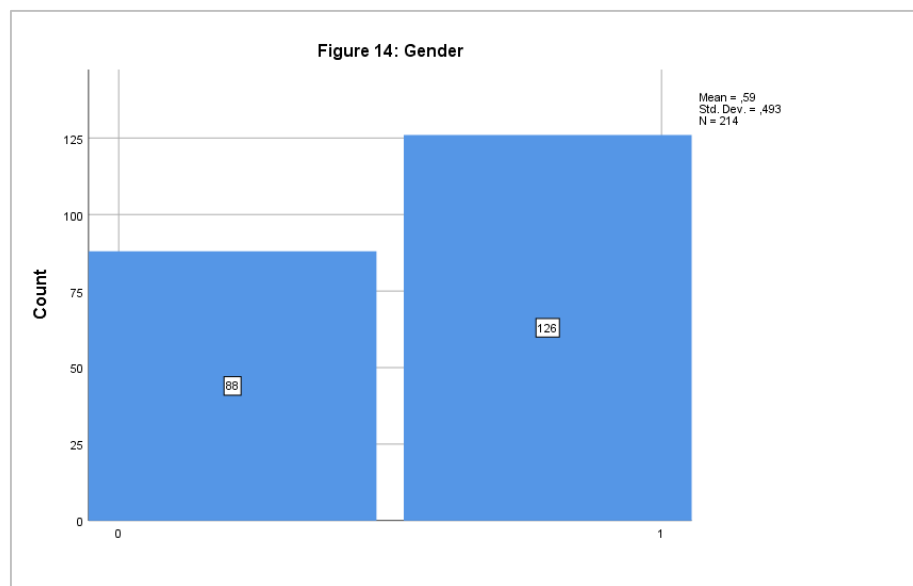


Figure 9: People's environmental motivation







The survey: The platform economy

Start of Block: Default Question Block

Q1 This survey is about the so called platform economy. Platform economies are economies organized via a digital platform, that means a website or application. We would like for you to tell us about your experiences regarding these platforms. However, you also are an important participant in case you have never heard of such platforms.

We will focus on two particular forms of the platform economy: In the sharing economy (that means sharing platforms), consumers grant each other access to their under-utilized goods, possibly for money (e.g. foodsharing, second-hand marketplaces on facebook, carsharing such as uber, blablacar or neighbourhood-cars, ebay classifieds, couchsurfing, or Airbnb).

Please note: Sharing can mean an ultimate transfer of ownership or lending a good to someone temporary. Both options can be either for free or for money.

In the service economy (that means service platforms), people provide services and offer them to customers (e.g. delivery services such as foodora or postmates, transportation services such as uber or lyft or household services). However, some platforms fit in both categories. A good example is Uber, where drivers offer a service but also share their cars with you.

Q2 Using or buying a service or good via one of the platform types introduced before means participating in the related economy. Have you ever participated in a sharing and/or a service economy? If yes, in which form?

Note: Some platforms are difficult to categorize in one of the options below, as for example Uber or Airbnb. In the case you used such a platform, please choose "I participated in both".

- ☐ I have never participated in the sharing or in the service economy (1)
- ☐ I only participated in the sharing economy (2)
- ☐ I only participated in the service economy (3)
- ☐ I participated in both types (4)

Skip To: Q4 If Using or buying a service or good via one of the platform types introduced before means participa... = I have never participated in the sharing or in the service economy

Skip To: Q76 If Using or buying a service or good via one of the platform types introduced before means participa... = I only participated in the sharing economy

Skip To: Q75 If Using or buying a service or good via one of the platform types introduced before means participa... = I only participated in the service economy

Skip To: Q8 If Using or buying a service or good via one of the platform types introduced before means participa... = I participated in both types

Q4 Remember: The sharing economy is about sharing a good, as for example a car, an appartement, clothes you don't wear anymore or food, possibly for money. Which of the following statements is true for you?

- ☐ I have never heard of the sharing economy (1)
- ☐ I have heard of the sharing economy but have never used related digital platforms (2)

Q14 We now continue with questions on your personal value orientation and your political orientation.

Q5 People sometimes talk about what the aims of your country should be for the next ten years. Below, some of the goals which different people would give top priority are listed.

Would you please say which one of these you, yourself, consider the most important? (choose one of the four options below under "first choice")

And which would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
A high level of economic growth (1)	<input type="checkbox"/>	<input type="checkbox"/>
Making sure my country has strong defense forces (2)	<input type="checkbox"/>	<input type="checkbox"/>
Seeing that people have more say about how things are done at their jobs and in their communities (3)	<input type="checkbox"/>	<input type="checkbox"/>
Trying to make our cities and countryside more beautiful (4)	<input type="checkbox"/>	<input type="checkbox"/>

Q6 If you had to choose, which one of the things presented below would you say is most important? (choose one of the four options below under "first choice")

And which would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
Maintaining order in nation (1)	<input type="checkbox"/>	<input type="checkbox"/>
Giving people more say in important government decisions (2)	<input type="checkbox"/>	<input type="checkbox"/>

Fighting high prices (3)

☐☐

Protecting freedom of speech (4)


☐☐

Q7 Here is another list. In your opinion, which one of these is most important? (choose one of the four options below under "first choice")

And what would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
A stable economy (1)	<input type="checkbox"/>	<input type="checkbox"/>
Progress toward a less impersonal and more humane society (2)	<input type="checkbox"/>	<input type="checkbox"/>
Progress toward a society in which ideas count more than money (3)	<input type="checkbox"/>	<input type="checkbox"/>
The fight against crime (4)	<input type="checkbox"/>	<input type="checkbox"/>

Q15 In politics people sometimes talk of "left" and "right". Where would you place yourself on this scale, where 0 means the left and 10 means the right?

	Left	Right									
	0	1	2	3	4	5	6	7	8	9	10
Political orientation ()											

Q16 The final questions are about your background.

Some people talk about "social classes", whereby they refer to a division of a society based on social and economic status. In which of the "social classes" would you place yourself?

- ☐ Working Class (1)
 - ☐ Lower Middle Class (2)
 - ☐ Middle Class (3)
 - ☐ Upper Middle Class (4)
 - ☐ Upper Class (5)
 - ☐ I don't know (6)
-

Q17 What are you currently doing in your daily life?

- ☐ Houseperson (1)
 - ☐ Wage employed (2)
 - ☐ Self employed (3)
 - ☐ Retired (4)
 - ☐ Student (5)
 - ☐ Unemployed (6)
 - ☐ Disabled/long term ill (7)
 - ☐ Other (8)
-

Q18 What is your current occupation? Please state the title and your main tasks (e.g. Nurse: Taking care of patients; Store Manager: scheduling and handling customer service; Carpenter: Shaping and installing building materials).

Q19 How often do you have difficulties paying bills?

- ☐ All the time (1)
 - ☐ Most of the time (2)
 - ☐ From time to time (3)
 - ☐ Almost never (4)
 - ☐ Never (5)
 - ☐ I don't know (6)
-

Q20 What is your nationality?

Q21 How would you describe the area you live in?

- ☐ Urban (1)
 - ☐ Suburban or small town (2)
 - ☐ Rural (3)
 - ☐ I don't know (4)
-

Q22 What is your level of education? Please select the highest achieved level. If currently enrolled, please select the criteria which fits your enrollment.

- ☐ No school finished (1)
- ☐ Primary School (2)
- ☐ High School (3)
- ☐ Vocational training (4)
- ☐ Bachelor/ Master or more (5)

Q23 What is your year of birth?

▼ 2018 (1) ... 1919 (100)

Q24 What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Other (3)

Skip To: Q84 If What is your gender? = Male

Skip To: Q84 If What is your gender? = Female

Skip To: Q84 If What is your gender? = Other

Q76 Which are the specific platforms you have used before? Examples are: Uber, AirBnb, Couchsurfing, marketplaces on facebook, eBayClassifieds, Foodsharing, Blablacar and ToGoodToGoo -but there are many more!

Q77 Remember: The sharing economy is about sharing a good, as for example a car, an appartement, clothes you don't wear anymore or food, possibly for money.

Which of the following statements describes your frequency of participation in the sharing economy best?

- ☐ I have been on one or more of the sharing economy platforms and participated once (1)
- ☐ I participate in the sharing economy occasionally (once every few months) (2)
- ☐ I participate in the sharing economy regularly (at least every month) (3)
-

Q78 To what extent do you agree with the following statements regarding your motivation for participation in the sharing economy?

I participate in the sharing economy because...

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
... it allows me to save money (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I like the social interaction it enhances (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I want to avoid buying a good I would only use very seldom (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I want to make sure my goods are fully used (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I like its character of innovation (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... it allows me to make money (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I like the alternative economy (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q79 To what extent do you agree with the following statements?
Participating in the sharing economy raised my awareness for...

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
... different motives for participation (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... the importance of environment protection (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... the importance and opportunities of making/saving money (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... the importance of social interaction (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... alternative economies (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q86 We now continue with questions on your personal value orientation and your political orientation.

Q87 People sometimes talk about what the aims of your country should be for the next ten years. Below, some of the goals which different people would give top priority are listed.

Would you please say which one of these you, yourself, consider the most important? (choose one of the four options below under "first choice")

And which would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
A high level of economic growth (1)	<input type="checkbox"/>	<input type="checkbox"/>
Making sure my country has strong defense forces (2)	<input type="checkbox"/>	<input type="checkbox"/>
Seeing that people have more say about how things are done at their jobs and in their communities (3)	<input type="checkbox"/>	<input type="checkbox"/>

Trying to make our cities and countryside more beautiful (4)

☐☐

Q88 If you had to choose, which one of the things presented below would you say is most important? (choose one of the four options below under "first choice")

And which would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
Maintaining order in nation (1)	<input type="checkbox"/>	<input type="checkbox"/>
Giving people more say in important government decisions (2)	<input type="checkbox"/>	<input type="checkbox"/>
Fighting high prices (3)	<input type="checkbox"/>	<input type="checkbox"/>
Protecting freedom of speech (4)	<input type="checkbox"/>	<input type="checkbox"/>

Q89 Here is another list. In your opinion, which one of these is most important? (choose one of the four options below under "first choice")

And what would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
A stable economy (1)	<input type="checkbox"/>	<input type="checkbox"/>
Progress toward a less impersonal and more humane society (2)	<input type="checkbox"/>	<input type="checkbox"/>
Progress toward a society in which ideas count more than money (3)	<input type="checkbox"/>	<input type="checkbox"/>
The fight against crime (4)	<input type="checkbox"/>	<input type="checkbox"/>

Left Right

0 1 2 3 4 5 6 7 8 9 10

Political orientation ()

Some people talk about "social classes", whereby they refer to a division of a society based on social and economic status. In which of the "social classes" would you place yourself?

Q63 What are you currently doing in your daily life?

- ☐ Houseperson (1)
 - ☐ Wage employed (2)
 - ☐ Self employed (3)
 - ☐ Retired (4)
 - ☐ Student (5)
 - ☐ Unemployed (6)
 - ☐ Disabled/long term ill (7)
 - ☐ Other (8)
-

Q64 What is your current occupation? Please state the title and your main tasks (e.g. Nurse: Taking care of patients; Store Manager: scheduling and handling customer service; Carpenter: Shaping and installing building materials).

Q65 How often do you have difficulties paying bills?

- ☐ All the time (1)
 - ☐ Most of the time (2)
 - ☐ From time to time (3)
 - ☐ Almost never (4)
 - ☐ Never (5)
 - ☐ I don't know (6)
-

Q66 What is your nationality?

Q67 How would you describe the area you live in?

- ☐ Urban (1)
 - ☐ Suburban or small town (2)
 - ☐ Rural (3)
 - ☐ I don't know (4)
-

Q68 What is your level of education? Please select the highest achieved level. If currently enrolled, please select the criteria which fits your enrollment.

- ☐ No school finished (1)
 - ☐ Primary School (2)
 - ☐ High School (3)
 - ☐ Vocational Training (4)
 - ☐ Bachelor/ Master or more (5)
-

Q69 What is your year of birth?

▼ 2018 (1) ... 1919 (100)

Q70 What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Other (3)

Skip To: Q84 If What is your gender? = Male

Skip To: Q84 If What is your gender? = Female

Skip To: Q84 If What is your gender? = Other

Q75 Which are the specific platforms you have used before? Examples are: Uber, AirBnb, Postmates and Foodora - but there are many more!

Q9 Remember: The sharing economy is about sharing a good, as for example a car, an appartement, clothes you don't wear anymore or food, possibly for money. Which of the following statements is true for you?

- ☐ I have never heard of the sharing economy (1)
- ☐ I have heard of the sharing economy but have never used related digital platforms (2)

Q77 On service platforms, people provide services (e.g. transportation, delivery or household services) and offer them to customers. Which of the following statements is true for you?

- ☐ I have never heard of the service platform economy (1)
- ☐ I have heard of the service platform economy but have never used related digital platforms (2)
- ☐ I have been on one or more of the service platform economy websites and participated once (3)
- ☐ I participate in the platform economy occasionally (once every few month) (4)
- ☐ I participate in the platform economy regularly (at least every month) (5)

Q78 To what extent do you agree with the following statements?

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
It is cheaper to use a platform service compared to traditional commerce. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is difficult to know who is responsible in	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

the case of failure when using a platform. (2)

Platform workers should be paid at least minimum wage. (3)

I do not trust internet transactions in general. (4)

The right to organize in labor unions should be granted to platform workers just the same. (5)

Online platforms are transparent about services and prices. (6)

Platforms should provide insurance regarding sickness, disability, and liability for people working via the platform. (7)

Using services provided via a digital platform is more convenient than using traditional services. (8)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q79 In recent years, some platform workers have been protesting the conditions under which they work, for example low wages, lack of insurance or prohibition to organize in labor unions. Have you heard of such protests?

- ☐ Yes (1)
- ☐ No (2)
- ☐ I don't know (3)

Skip To: Q80 If In recent years, some platform workers have been protesting the conditions under which they work,...
= Yes

Skip To: Q81 If In recent years, some platform workers have been protesting the conditions under which they work,...
= No

Skip To: Q81 If In recent years, some platform workers have been protesting the conditions under which they work,...
= I don't know

Q80 Do you support these protests?

- ☐ Strongly support (1)
- ☐ Rather support (2)
- ☐ Might or might not support (3)
- ☐ Rather not support (4)
- ☐ Don't support at all (5)

Q81 As a customer, would you be willing to pay a higher price in order to ensure an improvement regarding those conditions (low wages, lack of insurance or prohibition to organize in labor unions)?

0 10 20 30 40 50

Amount you would be willing to pay extra in % ()



Q25 We now continue with questions on your personal value orientation and your political orientation.

Q71 People sometimes talk about what the aims of your country should be for the next ten years. Below, some of the goals which different people would give top priority are listed.

Would you please say which one of these you, yourself, consider the most important? (choose one of the four options below under "first choice")

And which would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
A high level of economic growth (1)	<input type="checkbox"/>	<input type="checkbox"/>

Making sure my country has strong defense forces (2)

☐☐

Seeing that people have more say about how things are done at their jobs and in their communities (3)

☐☐

Trying to make our cities and countryside more beautiful (4)

☐☐

Q72 If you had to choose, which one of the things presented below would you say is most important? (choose one of the four options below under "first choice")

And which would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
Maintaining order in nation (1)	<input type="checkbox"/>	<input type="checkbox"/>
Giving people more say in important government decisions (2)	<input type="checkbox"/>	<input type="checkbox"/>
Fighting high prices (3)	<input type="checkbox"/>	<input type="checkbox"/>
Protecting freedom of speech (4)	<input type="checkbox"/>	<input type="checkbox"/>

Q37 Here is another list. In your opinion, which one of these is most important? (choose one of the four options below under "first choice")

And what would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
A stable economy (1)	<input type="checkbox"/>	<input type="checkbox"/>
Progress toward a less impersonal and more humane society (2)	<input type="checkbox"/>	<input type="checkbox"/>
Progress toward a society in which ideas count more than money (3)	<input type="checkbox"/>	<input type="checkbox"/>

The fight against crime (4)

☐☐

Q83 To what extent do you agree with the following statement?


	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
The government should take measures to reduce differences in income levels. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q82 And again: To what extent do you agree with the following statements?
Social protection of workers...

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
... costs businesses too much in taxes and charges. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... place too great a strain on the economy. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... prevents widespread poverty. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... lead to a more equal society. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... make people lazy. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... make people less willing to care for each other. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q74 In politics people sometimes talk of "left" and "right". Where would you place yourself on this scale, where 0 means the left and 10 means the right?

	Left	Right									
	0	1	2	3	4	5	6	7	8	9	10

Political orientation ()	
--------------------------	--

Q44 The final questions are about your background.

Some people talk about "social classes", whereby they refer to a division of a society based on social and economic status. In which of the "social classes" would you place yourself?

- ☐ Working Class (1)
 - ☐ Lower Middle Class (2)
 - ☐ Middle Class (3)
 - ☐ Upper Middle Class (4)
 - ☐ Upper Class (5)
 - ☐ I don't know (6)
-

Q45 What are you currently doing in your daily life?

- ☐ Houseperson (1)
 - ☐ Wage employed (2)
 - ☐ Self employed (3)
 - ☐ Retired (4)
 - ☐ Student (5)
 - ☐ Unemployed (6)
 - ☐ Disabled/long term ill (7)
 - ☐ Other (8)
-

Q46 What is your current occupation? Please state the title and your main tasks (e.g. Nurse: Taking care of patients; Store Manager: scheduling and handling customer service; Carpenter: Shaping and installing building materials).

Q47 How often do you have difficulties paying bills?

- ☐ All the time (1)
 - ☐ Most of the time (2)
 - ☐ From time to time (3)
 - ☐ Almost never (4)
 - ☐ Never (5)
 - ☐ I don't know (6)
-

Q48 What is your nationality?

Q49 How would you describe the area you live in?

- ☐ Urban (1)
 - ☐ Suburban or small town (2)
 - ☐ Rural (3)
 - ☐ I don't know (4)
-

Q50 What is your level of education? Please select the highest achieved level. If currently enrolled, please select the criteria which fits your enrollment.

- ☐ No school finished (1)
 - ☐ Primary School (2)
 - ☐ High School (3)
 - ☐ Vocational training (4)
 - ☐ Bachelor/ Master or more (5)
-

Q51 What is your year of birth?

▼ 2018 (1) ... 1919 (100)

Q52 What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Other (3)

Skip To: Q84 If What is your gender? = Male

Skip To: Q84 If What is your gender? = Female

Skip To: Q84 If What is your gender? = Other

Q8 Which are the platforms you have used before? Examples are: Uber, AirBnb, Couchsurfing, eBayClassifieds, Foodsharing, Postmates, Foodora, Blablacar and ToGoodToGoo -but there are many more!

Q85 Remember: The sharing economy is about sharing a good, as for example a car, an appartement, clothes you don't wear anymore or food, possibly for money.

Which of the following statements describes your frequency of participation in the sharing economy best?

- ☐ I have been on one or more of the sharing economy platforms and participated once (1)
- ☐ I participate in the sharing economy occasionally (once every few months) (2)
- ☐ I participate in the sharing economy regularly (at least every month) (3)

Q91 On service platforms, people provide services (e.g. transportation, delivery or household services) and offer them to customers. Which of the following statements is true for you?

- ☐ I have been on one or more of the service platform economy platforms and participated once (1)
- ☐ I participate in the service platform economy occasionally (once every few months) (2)
- ☐ I participate in the service platform economy regularly (at least every month) (3)

Q10 To what extent do you agree with the following statements regarding your motivation for participation in the sharing economy?

I participate in the sharing economy because...

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
... it allows me to save money (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I like the social interaction it enhances (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

... I want to avoid buying a physical resource I would only use seldomly (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I want to make sure my goods are fully used (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I like its character of innovation (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... it allows me to make money (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... I like the alternative economy (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 To what extent do you agree with the following statements?
Participating in the sharing economy raised my awareness for...

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
... different motives for participation (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... the importance of environment protection (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... the importance and opportunities of making/saving money (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... the importance of social interaction (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... alternative economies (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q80 To what extent do you agree with the following statements?

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
It is cheaper to use a platform service compared to traditional commerce. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is difficult to know who is responsible in the case of failure when using a platform. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Platform workers should be paid at least minimum wage. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not trust internet transactions in general. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The right to organize in labor unions should be granted to platform workers just the same. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Online platforms are transparent about services and prices. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Platforms should provide insurance regarding sickness, disability, and liability for people working via the platform. (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Using services provided via a digital platform is more convenient than using traditional services. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q81 In recent years, some platform workers have been protesting the conditions under which they work, for example low wages, lack of insurance or prohibition to organize in labor unions. Have you heard of such protests?

- ☐ Yes (1)
- ☐ No (2)
- ☐ I don't know (3)

Skip To: Q82 If In recent years, some platform workers have been protesting the conditions under which they work,... = Yes

Skip To: Q83 If In recent years, some platform workers have been protesting the conditions under which they work,... = No

Skip To: Q83 If In recent years, some platform workers have been protesting the conditions under which they work,... = I don't know

Q82 Do you support these protests?

- ☐ Strongly support (1)
- ☐ Rather support (2)
- ☐ Might or might not support (3)
- ☐ Rather not support (4)
- ☐ Don't support at all (5)

Q83 As a customer, would you be willing to pay a higher price in order to ensure an improvement regarding those conditions (low wages, lack of insurance or prohibition to organize in labor unions)?

0 10 20 30 40 50

Amount you would be willing to pay extra in % ()



Q29 We now continue with questions on your personal value orientation and your political orientation.

Q33 People sometimes talk about what the aims of your country should be for the next ten years. Below, some of the goals which different people would give top priority are listed.

Would you please say which one of these you, yourself, consider the most important? (choose one of the four options below under "first choice")

And which would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
A high level of economic growth (1)	<input type="checkbox"/>	<input type="checkbox"/>
Making sure my country has strong defense forces (2)	<input type="checkbox"/>	<input type="checkbox"/>
Seeing that people have more say about how things are done at their jobs and in their communities (3)	<input type="checkbox"/>	<input type="checkbox"/>
Trying to make our cities and countryside more beautiful (4)	<input type="checkbox"/>	<input type="checkbox"/>

Q35 If you had to choose, which one of the things presented below would you say is most important? (choose one of the four options below under "first choice")

And which would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
Maintaining order in nation (1)	<input type="checkbox"/>	<input type="checkbox"/>
Giving people more say in important government decisions (2)	<input type="checkbox"/>	<input type="checkbox"/>
Fighting high prices (3)	<input type="checkbox"/>	<input type="checkbox"/>
Protecting freedom of speech (4)	<input type="checkbox"/>	<input type="checkbox"/>

Q39 Here is another list. In your opinion, which one of these is most important? (choose one of the four options below under "first choice")

And what would be the next most important? (Choose one of the remaining three options under "second choice")

	First choice (tick one box) (1)	Second choice (tick another box) (2)
A stable economy (1)	<input type="checkbox"/>	<input type="checkbox"/>
Progress toward a less impersonal and more humane society (2)	<input type="checkbox"/>	<input type="checkbox"/>
Progress toward a society in which ideas count more than money (3)	<input type="checkbox"/>	<input type="checkbox"/>
The fight against crime (4)	<input type="checkbox"/>	<input type="checkbox"/>

Q84 To what extent do you agree with the following statement?

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
The government should take measures to reduce differences in income levels. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q85 And again: To what extent do you agree with the following statements?

Social protection of workers...

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
... costs businesses too much in taxes and charges. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... place too great a strain on the economy. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

... prevents widespread poverty. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... lead to a more equal society. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... make people lazy. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
... make people less willing to care for each other. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q43 In politics people sometimes talk of "left" and "right". Where would you place yourself on this scale, where 0 means the left and 10 means the right?

	Left	Right									
	0	1	2	3	4	5	6	7	8	9	10
Political orientation ()											

Q53 The final questions are about your background.

Some people talk about "social classes", whereby they refer to a division of a society based on social and economic status. In which of the "social classes" would you place yourself?

- ☐ Working Class (1)
- ☐ Lower Middle Class (2)
- ☐ Middle Class (3)
- ☐ Upper Middle Class (4)
- ☐ Upper Class (5)
- ☐ I don't know (6)

Q54 What are you currently doing in your daily life?

- ☐ Houseperson (1)
 - ☐ Wage employed (2)
 - ☐ Self employed (3)
 - ☐ Retired (4)
 - ☐ Student (5)
 - ☐ Unemployed (6)
 - ☐ Disabled/long term ill (7)
 - ☐ Other (8)
-

Q55 What is your current occupation? Please state the title and your main tasks (e.g. Nurse: Taking care of patients; Store Manager: scheduling and handling customer service; Carpenter: Shaping and installing building materials).

Q56 How often do you have difficulties paying bills?

- ☐ All the time (1)
 - ☐ Most of the time (2)
 - ☐ From time to time (3)
 - ☐ Almost never (4)
 - ☐ Never (5)
 - ☐ I don't know (6)
-

Q57 What is your nationality?

Q58 How would you describe the area you live in?

- ☐ Urban (1)
 - ☐ Suburban or small town (2)
 - ☐ Rural (3)
 - ☐ I don't know (4)
-

Q59 What is your level of education? Please select the highest achieved level. If currently enrolled, please select the criteria which fits your enrollment.

- ☐ No school finished (1)
 - ☐ Primary School (2)
 - ☐ High School (3)
 - ☐ Vocational training (4)
 - ☐ Bachelor/ Master or more (5)
-

Q60 What is your year of birth?

▼ 2018 (1) ... 1919 (100)

Q61 What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Other (3)

Skip To: Q84 If What is your gender? = Male

Skip To: Q84 If What is your gender? = Female

Skip To: Q84 If What is your gender? = Other

Q84 Thank you very much for participating! You made it much easier for us to obtain our bachelor degree. Please press the blue button a last time.

End of Block: Default Question Block
