Sharing Economy Platforms: A study of Social Exchange, Reciprocity and Commitment

Dinara Davlembayeva

A thesis submitted for the Degree of Doctor of Philosophy to
Newcastle University Business School at Newcastle University

May 2021

Abstract

A sharing economy is a socio-economic ecosystem enabling collaborative use of resources through online platforms. It is different from other economic forms of relations in that the exchange of resource may be free or for any other form of compensation. Growing transactions through sharing economy platforms reflects a change in individuals' values and preferences in the consumption of resources. The use of platforms has implications in terms of redefining the behaviour of people and their interactions with each other. Also, it brings a social impact through providing people with access to resources that otherwise would not be affordable and redistributing underused ones. Given the assumed importance of the sharing economy in contributing to collective benefits, it is imperative to examine the drivers motivating the use of sharing economy platforms, the perceived outcomes of use behaviour and users' commitment to platforms. This will make it possible to understand how to fuel the interest of users and will contribute to the development of the crowd-based economy.

The literature on the sharing economy provides a limited view of the drivers which make people participate in sharing economy transactions. It lacks an overarching approach in examining the psychological and social factors that may facilitate or inhibit social exchange through platforms. When it comes to the impacts of the sharing economy on individuals, the literature has a speculative nature, lacking empirical evidence about the users' perspective on the outcomes of relations in terms of their social benefits and wellbeing. In addition, reciprocity in relations between the members of platforms has remained untouched by empirical scrutiny. While the literature has debated the importance of reciprocity norms in sharing economy relations, the determinants and outcomes of perceived reciprocity in the sharing economy have been left unexplored.

Given the above, this thesis used a Social Exchange Theory framework for examining the drivers of participation in the sharing economy by exploring the effects of social capital factors and social values. Also, the research aimed to examine the contribution of the sharing economy to the perceived wellbeing of and social inclusion by users. To shed light on the determinants of perceived reciprocity, the thesis adopted the Equity Theory perceptive. That enabled us to examine the effect of social factors (social identity and social comparison), justice perception and

individual personality traits on the formation of reciprocity perception. As far as the outcomes of perceived reciprocity are concerned, the research hypothesised the effect of perceived reciprocity on relationship commitment and coping mechanisms that people employ after comparing the outcomes against the contributions that they have made to exchange relations. To enrich the understanding of the potential variance in the relationships between the determinants of perceived reciprocity, perceived reciprocity and behavioural outcomes, the thesis aimed to test the moderating role of situational and personal factors (i.e. the value of exchange, social influence, response efficacy and self-efficacy).

The research adopted a cross-sectional research design to collect data. To examine the proposed relationships, two surveys were conducted. The data were collected from the users of sharing economy platforms in the United States, who had access to the surveys through a URL. The questionnaires were designed in such a way as to provide detailed guidelines on completing the survey. It collected the demographic profile of the respondents and measured the constructs of the proposed research model, by preserving the anonymity of respondents. As a result of the first survey, 487 responses were collected. The final sample for the second survey consisted of 398 responses. A structural equation modelling approach was used to test the research model.

The findings indicated that the use of the sharing economy was conditioned by the positive effect of egoistic belief, reciprocity norm, social value, and the negative effect of identification. The results made it possible to conclude that participation in the sharing economy is motivated by the need to create an image that would help people perform particular roles in the community. It was important for users that the exchange would be reciprocated either immediately or in future transactions and that the exchange satisfied personal selfish needs. The strong relationships between use behaviour, social inclusion and wellbeing, moderated by age, use frequency and use intensity, were confirmed. The analysis of the effects of the determinants on perceived reciprocity confirmed the importance of social identity, ingroup comparison, procedural justice and predisposition towards outcome maximisation. The effect of perceived reciprocity on relationship commitment and coping mechanisms (i.e. emotion-focused and problem-focused) moderated by individual and situational factors (the value of exchange, social influence, response efficacy and self-efficacy) was also supported.

The results of the research contribute to the literature on the sharing economy. This research broadens the understanding of the social and psychological underpinnings of sharing economy practices. The results provide evidence about the role of community-oriented motives, which have long been debated in the literature. The adoption of the overarching social capital framework provided new insight into the nature of collaborative relations, which goes against the common and established representation of the sharing economy. In addition, the thesis provides empirical evidence about the effect of the sharing economy on social inclusion and subjective well-being, which had been speculated about before. The results contribute to the literature by explaining the determinants of perceived reciprocity in the sharing economy context, which have been under-researched previously. The examination of social factors and justice perception reconciles social and rational perspectives, while the effect of reciprocity on relationship commitment through coping behaviour sheds new light on the application of equity theory.

From a practice perspective, the results provide insight into the psychological patterns of the sharing economy users, which might help regulate relations and increase collaborations. The strong relationship between use behaviour, social inclusion and subjective well-being equip policy-makers with evidence that can be set against the discussions on potential socio-economic disruptions incurred by the sharing economy. The thesis also offers implications for practice by informing practitioners about ways to ensure the loyalty of the users of sharing economy platforms.

Declaration

I declare that the thesis is my own work and has not been submitted for any other degree or professional qualification. Parts of the thesis have been submitted to journals and conferences as noted below.

Published/Presented:

1. Davlembayeva, D., Papagiannidis, S. and Alamanos, E., 2021, Sharing Economy Platforms: An Equity Theory Perspective on Reciprocity and Commitment. *Journal of Business Research*

2. Davlembayeva, D., Papagiannidis, S. and Alamanos, E., 2020, Sharing Economy: Studying the Social and Psychological Factors and the Outcomes of Social Exchange. *Technological Forecasting and Social Change*

3. Davlembayeva, D., Papagiannidis, S. and Alamanos, E., 2020, Reciprocity in the Sharing Economy. *European Marketing Association Conference (EMAC) 2020*

4. Davlembayeva, D., Papagiannidis, S. and Alamanos, E., 2019. Mapping the economics, social and technological attributes of the sharing economy. *Information Technology & People.*

5. Davlembayeva, D., Papagiannidis, S. and Alamanos, E., 2019, September. Reciprocity and Social Exchange in the Sharing Economy. In *Conference on e-Business, e-Services and e-Society* (pp. 559-569). Springer, Cham.

6. Davlembayeva, D., Papagiannidis, S. and Alamanos, E., 2018. Defining and analysing the dimensions of the sharing economy. In *British Academy of Management 2018 Conference.* Newcastle University.

Acknowledgment

I would like to thank the following people, who played a crucial role in my life during PhD studies. The deepest gratitude is to my first supervisor, Professor Savvas Papagiannidis, without whom I would not have been able to complete this research. His consistent support and guidance during the PhD journey helped me learn and improve my skills and knowledge. His approach to work has been a great example of how to address any challenges faced. I appreciate all the opportunities given during these years.

Also, I would like to express my appreciation to my second supervisor, Dr Eleftherios Alamanos, for being very supportive and helpful. I am thankful for his contribution to the research project. His help, feedback and advice, especially with regards to the methodology of the research, have been invaluable.

I would like to thank my friends, with whom I have shared a lot of positive moments for the last three years.

The most warm-hearted gratitude I would like to express is to my parents and my sister for being truly supportive, loving and caring. Thank you for constantly cheering me up and being always by my side.

Table of Contents

List of Tables

List of Figures

1. Introduction

The last decade has seen a landmark turn for the market and traditional economic relations due to the rise of a sharing economy. The sharing economy is a crowd-based socio-economic ecosystem which has made it possible to use resources without their possession either for free or for compensation through the practices of collaborative consumption, sharing, gift-giving and commodity exchange (Belk, 2014, Botsman and Rogers, 2011). Although those practices are not new to the relations of people, the sharing economy represents a new form of market system due to the role of online platforms mediating the collaborations between people (Kennedy, 2016). The advent of digital technology has introduced sharing economy platforms in a number of sectors, including transportation (e.g. Uber, Lyft, Gett, Zimride), accommodation (e.g. Airbnb, HomeAway, Couchsurfing, GuesttoGuest, HomeExchange), fashion (e.g. Rent the Runway, DesignerShare, Outdress), care services (e.g. Care.com, UrbanSitter, Bubble, DogVacay, Rover), exchange of goods and services (e.g. Freecycle, Freegle), knowledge and skills sharing (e.g. Shared Earth, YardShare), finance (e.g. CrowdCube. Kickstarter, Sofi, Lending Club) and others. Traditional companies across a range of industries have been shaken by the introduction of internet-enabled collaborative practices. Sharing economy platforms have been hugely endorsed by people, as they offer an alternative and sustainable form of the use of resources and services. The promised benefits, in turn, contributed to their significant growth (Merton, 2015).

The sharing economy can be considered transformative for the economy and social relations due to two primary reasons. First, it has changed the way people access, consume and produce tangible and intangible resources within a new marketplace of collaborative and peer-to-peer online platforms (Botsman and Rogers, 2011). The principle of "*non-ownership*" lying at the heart of the sharing economy enables people to reuse and recycle durable goods, idle resources, second-hand products and offerings exchanged through on-demand systems (Frenken and Schor, 2017; Esben Rahbek Gjerdrum and Sarah, 2015; Retamal, 2017; Fremstad, 2017; Boons and Bocken, 2018). The exploitation of these resources lowers the demand for new goods and services, ensuring the reduction of consumption and a decreasing cost of access to resources (Frenken and Schor, 2017). That results in less waste and the preservation of resources, with economic, social and environmental implications (Fremstad, 2017; Retamal, 2017).

Second, the increase in transactions in the sharing economy reflects the changes in consumer purchasing values underlying behaviour (Wallenstein and Shelat, 2017a, Wallenstein and Shelat, 2017b, Pazaitis et al., 2017, Kannan, 2017). The interest of the academic community has increased exponentially over the past five years and the topic has evolved into a diverse body of knowledge. However, the sharing economy has been developing without sufficient evidence in the literature explaining the success of the new economic system and the factors stimulating users' demand (Frenken and Schor, 2017). Given the potential of the sharing economy to deliver societal benefits (Frenken and Schor, 2017), it is imperative to ensure the sustainability of a collaborative mode of resource distribution. By exploring consumer behaviour, commitment and motivations it will be possible to understand how to fuel users' interest, how to redefine and market platforms' offerings, and how to contribute to the development of the crowd-based economy. Hence, the focus of this thesis is to examine the factors underpinning social exchange and the commitment of people in the sharing economy, as well as investigate the outcomes of participation in the sharing economy.

The following sections in the chapter will provide background information on the sharing economy, including definitions, applications and implications. Then, a brief summary of prior research on consumer behaviour in the sharing economy will be provided to make it possible to identify research gaps and propose the aims and objectives of the thesis. Theoretical and practical implications of the research are discussed further in the section. The section will conclude with the structure of the thesis.

1.1. Sharing Economy

The sharing economy has been examined from multi-disciplinary perspectives, mainly covering social, economic and technological characteristics of the phenomenon. The multi-disciplinary focus produced a diverse body of knowledge and a variety of synonymous terms, characterising the emergent phenomenon, namely, collaborative consumption, access economy, peer-to-peer networks, access-based consumption and gig-economy among other terms. The term "collaborative consumption" originates from the research exploring the events of social sharing, which dates back to 1970's (Felson and Spaeth, 1978). The works of Botsman and Rogers (2011), Belk (2007) and Schor and Fitzmaurice (2015) contribute to this stream of research by

studying the phenomenon as a form of social practice. The explanation of the sharing economy from the social perspective focuses on collaboration, where people (family, community, friends) are banding together to consume tangible and intangible goods (e.g. time, skills, money), driven by the endeavours of cooperation and generosity. The economic properties of sharing were brought in with the introduction of the term "access economy" (Rifkin, 2001) and its variations, such as, "peer-to-peer networks" and "access-based consumption" (Zelizer, 2004, Bardhi and Eckhardt, 2012, Bardhi et al., 2012). This stream of the literature puts great emphasis on transactional economics and represents the sharing economy as a market-mediated business model that enables non-ownership access to assets through a network of platforms. The technological perspective was highlighted with the introduction of the terms "mesh economy" and "gig economy" (Gansky, 2010), which emphasised the interconnectedness of people within the digital network (the mesh) and the distribution of goods and services through technology-mediated platforms. Despite multiple ways to conceptualise the sharing economy, the most popular approach is to represent it as a socio-economic ecosystem enabling the collaborative consumption of resources. Collaborative consumption is defined as a practice of "*coordinating the acquisition and distribution of a resource for a fee or other compensation"* (Belk, 2014).

The mass exposure of online platforms enabling collaborative consumption by the public coincides with the success of Airbnb and Uber, the largest accommodation sharing and ridesharing platforms (Martin, 2016). Over the years, the popularity of sharing economy platforms across the transportation, accommodation, consumer goods and professional services sectors has exploded. This business trend has been rapidly growing due to the infusion of more than 23 billion US dollars in venture capital into sharing economy start-ups since 2010 (Derek, 2019). That resulted in the wider adoption of sharing economy services, thus making around 35 per cent of the internet users utilise sharing economy services at least once a year (Thrive Analytics, 2019). The leading countries by usage rate are the US, China and the UK. The statistics showed that people who use platforms at least once a year in China represent 75 per cent of the population, in the UK - 61 per cent of the population and in the US - 51 per cent of the population (Statista, 2019). According to a market forecast, the revenue of the sharing economy platforms in 2022 is projected to be 40.2 billion US dollars, the majority of which is accounted for by the countries of North and South America, comprising about 57.2 per cent. The second-largest region by revenue is Europe, comprising 19.2 per cent, while the rest of the world

accounts for 23.6 per cent of the revenue to be generated worldwide (Mazareanu, 2018b). Sector-wise, the fastest-growing segment of the sharing economy is represented by crowdfunding platforms, followed by online staffing, peer-to-peer accommodation, carsharing and entertainment services (Mazareanu, 2018a).

The latest available statistics on the sharing economy in the EU countries reports that 651 platforms were identified in the region in 2018. Those platforms operate as organisations with a 100 per cent sharing economy business model (established to operate specifically as collaborative platforms) or commercial platforms with elements of collaborative relations. The platforms identified fall into four categories, namely, transport (i.e. ridesharing, P2P vehicle rental, delivery services, parking spaces, rides on demand), accommodation (renting, home-sharing, home swapping), finance (equity and debt funding) and online skills (on-demand household services, on-demand professional services). The largest share in the sharing economy falls to the transportation and accommodation markets (European Commission, 2018). The biggest brands in the transportation area are Uber, Didi and Lyft, with a total value of 133 billion US dollars (Derek, 2019). The biggest accommodation sharing platform is Airbnb, which has been increasing the number of loyal customers over recent years and has reached the value of around 31 billion US dollars (Rudden, 2020). Of all the European countries, the UK is the second country based on the sharing economy market size, which is estimated to be around EUR 4.64 billion (European Commission, 2018).

The transformation of markets brings economic, environmental, institutional and social implications. People benefit from access to resources because the sharing economy makes products more affordable due to the reduction of costs on the transaction and the re-utilisation of idle resources (Barnes and Mattsson, 2016b). For example, instead of using public transport, people can enjoy travelling short distances via car or ride-sharing (BÁLINT and TRÓCSÁNYI). Also, people can afford to travel to foreign destinations by securing accommodation through apartment sharing platforms (Tussyadiah and Pesonen, 2015). The involvement of a larger population in the sharing economy means that passive consumer segments get involved in the redistribution of resources, which increases the gross-domestic-product (Harvey et al., 2014a). In addition, the sharing economy represents a new source of revenue, bringing entrepreneurship and employment opportunities. It is a solution for underqualified people, who otherwise would be

unemployed, as well as people seeking work flexibility (Rosenblat and Stark, 2016, Horney, 2016, Mauri et al., 2018). For instance, Uber recruits drivers under the term of being independent contractors, rather than employees. This position gives flexibility in terms of bargaining power and working conditions (Redfearn Iii, 2016). On the other hand, on-demand and self-employment bears regulatory and labour-management challenges. Due to the digital intermediation, the platforms may be non-accountable to laws. They may ignore the rights of employees in terms of fair wage rates and working conditions (Rosenblat and Stark, 2016).

From an environmental perspective, the sharing economy causes changes in consumer choices and economic practices (Laamanen et al., 2015). The reuse and recycling of durable goods, idle resources, second-hand products and offerings exchanged through on-demand systems lowers the demand for new goods and services, resulting in less waste and the preservation of resources (Fremstad, 2017). The behavioural changes of sharing economy users contribute to the development of a sustainable lifestyle, which is deemed to be a tool stabilising inequalities in diverse market economies (Hobson and Lynch, 2016, Hong and Vicdan, 2016, Martin et al., 2015). However, the degree to which the increased access to resources has reduced pressure on the environment is still a subject of controversy (Tussyadiah and Pesonen, 2015). The assumption that the positive environmental implications of the sharing economy are more rhetorical than factual are rooted in little empirical evidence. On the one hand, the results of a longitudinal experiment demonstrated that with the expansion of Craiglist platforms, the generation of waste had fallen in some US states. The correlation suggests that people started reusing products and services (Fremstad, 2017). On the other hand, there is no study to examine the degree to which low-cost transport and accommodation sharing increases tourism and, in turn, carbon emissions.

The sharing economy reshapes markets, which causes institutional implications in terms of changes in the rules governing market relations (Watanabe et al., 2017, Laurell and Sandström, 2016). Institutional changes entail regulatory complexity and challenges with ensuring the safety and privacy of users, protecting employees' rights and imposing tax policies on platforms. The digital nature of transactions enables sharing economy platforms to bypass obligatory legislator mechanisms (Miller, 2016, Sprague, 2015). In the long-term, the lack of regulatory measures may have a significant negative economic impact, whereby digital transactions may fuel the grey

economy, and, in turn, weaken the macro-economic capacity of countries (Watanabe et al., 2017, Dabrowska and Gutkowska, 2015).

Apart from the impact at the institutional level, the sharing economy brings social implications by facilitating social interactions and developing social networks (Ferrari, 2016, Yang et al., 2017). The increase in social interactions may potentially contribute to social inclusion, although such a relation has not been observed and still raises debates (Ferrari, 2017, Schor et al., 2016). In addition, positive economic and environmental impacts may potentially improve social wellbeing. However, objectively, this is difficult to measure, while evidence about perceived wellbeing is not available in the literature yet. Given the implications that the sharing economy may potentially have, research is required to obtain users' insights into collaborative relations in the sharing economy. That will help understand and predict further development of the phenomenon.

1.2. Research on Consumer Behaviour in the Sharing Economy

The research on antecedents and outcomes of user behaviour in the sharing economy is characterised by the dichotomisation of perspectives on behavioural drivers and the focus on macro-level socio-economic impacts. Given the socio-economic nature of sharing economy relations, the literature often mis-conceptualises the economic and non-economic boundaries of practices, which splits the research into two streams. The literature that is inclined towards the economic perspective of covering the practice discusses the permanent exchange of used goods or compensated access-based transport and accommodation sharing (Esben Rahbek Gjerdrum and Sarah, 2015, Karlsson et al., 2017, Oskam and Boswijk, 2016, Gong et al., 2019, Lindblom et al., 2018). These practices are represented by selling and purchasing second-hand items through online marketplaces and product-service systems (PSS) (Fremstad, 2017, Esben Rahbek Gjerdrum and Sarah, 2015, Retamal, 2017, Karlsson et al., 2017, Hamari, 2013). Typically, the motives for participation in such practices concern the increased utility of the use of sharing economy platforms (Ertz et al., 2016, Fremstad, 2017). Therefore, the literature discusses the role of pricing strategies (Malin and Chandler, 2017, Posen, 2015), financial value, risks (Hwang and Griffiths, 2017, Tussyadiah and Pesonen, 2015), materialistic values and price consciousness (Lindblom et al., 2018) in consumer behaviour. The relative advantage of the sharing economy

compared to other market-based relations facilitates the adoption and development of the new socio-economic ecosystem (Min et al., 2018). Another stream in the literature adopted the social approach in investigating the practices, like gift-giving, reuse of personal products and house swapping (Aptekar, 2016, Matteo and Daniele, 2014, Whitham and Clarke, 2016). These pro-social practices are believed to be based on non-obligatory compensation, explained by the concept of generalised reciprocity (Belk, 2010). Research postulates that nonmonetary-based collaborative consumption is stimulated by low social distance, moral and social motives (Schreiner et al., 2018, Bucher et al., 2016). However, non-compensated practices may imply an obligation that is laid on a consumer in future transactions (Whitham and Clarke, 2016, Martin et al., 2015). The expectation of postponed reciprocation gives an implicit material value to the transaction, although the reciprocation can not be strictly monetised. The practices based on negotiated reciprocity cannot be entirely credited to monetary drivers of consumption either. The motives for explicitly compensated practices could be related to social values, pro-environmental or altruistic beliefs (Piscicelli et al., 2015, Shaheen and Chan, 2016, Huber, 2017, Yang et al., 2017, Voytenko Palgan et al., 2017, Schor et al., 2016). Given the above, owing to the social - economic dichotomy of the perspectives, the users' insight into the social and psychological drivers of sharing economy relations is still limited. Although several studies have investigated the role of factors such as trust, culture and reputation (Wu and Shen, 2018, Mittendorf, 2018, ter Huurne et al., 2018), still, the effect of other social factors playing a key role in user behaviour (e.g. social support, shared vision) is left unexplained. As far as the outcomes of the sharing economy are concerned, the positive impact of the sharing economy on people's lives is assumed based on economic implications of the non-ownership model of consumption (Frenken and Schor, 2017). However, there is no first-hand data to support the arguments.

The literature provides extensive conceptual discussion about the role of reciprocity in social exchange. However, there are only few empirical studies exploring perceived reciprocity and its impact on further relations. The degree to which collaborative relations are reciprocal is a subject of debate, as the existing body of knowledge has been shaped by contradictory empirical evidence and underpinning theoretical discussions. Theoretically, a great deal of sharing economy relations are based on generalised reciprocity, and hence might not be reciprocated (Belk, 2010, Sahlins, 1974). Drawing on empirical evidence, expected reciprocity is one of the most important motivators of individuals' participation both in commercial and non-commercial

relations (Guyader, 2018, Cherry and Pidgeon, 2018). However, the findings about the degree to which reciprocity is achieved in relations are not conclusive. Research has found that reciprocation can be in person (Bridges and Vásquez, 2018), collective (delayed reciprocation to another party of the group) (Corciolani and Dalli, 2014) or it may never take place (Sthapit and Jiménez-Barreto, 2018). Given the above, the literature needs an exploration of the contributing factors to perceived reciprocity to shed light on contradictory evidence. As far as the outcomes of reciprocal relations are concerned, the are few research studies providing qualitative insight into the role of reciprocity in sustained relations (Harvey et al., 2014b, Pottinger, 2018). Such scarce evidence requires an examination of the behavioural and psychological consequences of reciprocity evaluation. That knowledge would help understand how people form their intention to commit to long-term collaborations, which is one of the contributors to sustained relations.

1.3. Research Gaps, Aims and Objectives

Considering the limited insight that the literature provides about user behaviour and reciprocity in the sharing economy, this thesis aims to address four identified gaps. First, the literature on the sharing economy has grown into a diverse body of knowledge that lacks a comprehensive review of the economic and social dimensions of the phenomenon and the enabling role of technology. The lack of a balanced analysis of the sharing economy dimensions inhibits the understanding of the underpinnings of the behaviour of people using platforms. A few review papers have been published, and those tended to explore the discourse in tourism. For example, Dredge's (Dredge and Gyimóthy, 2015) review aimed to examine the impact and opportunities that the sharing economy creates in tourism. Cheng (Cheng, 2016) adopted a comparative approach to explore key themes underlying the general literature about the sharing economy and the research related to tourism and hospitality. More recently, Cheng and Edwards (2019) have published a review comparing the discourse about tourism between the academic literature and the media. In contrast to the aforementioned studies, the review of Duran-Sanchez (Duran-Sanchez et al., 2016) examined the overall literature on the sharing economy, emphasising the changes it brings to people's lifestyle. Knote (Knote and Blohm, 2016) focused on the information systems underpinning the sharing economy, without, though, considering its socio-economic aspects. No systematic review has been published that covers and compares the relevant literature from an economic, a social and a technological perspective.

The second gap relates to the lack of evidence about the social and psychological drivers and outcomes of the participation in the sharing economy. Current studies are constrained in terms of the number of factors examined and the selection of platforms. The literature focuses on examining single variables, such as trust (Wu and Shen, 2018, Mittendorf, 2018, Zloteanu et al., 2018), cultural value (Gupta et al., 2019), price (Lindblom et al., 2018), reputation (ter Huurne et al., 2018) and privacy (Lutz et al., 2018). Given the above, the implications are limited due to the lack of an overarching approach to examining the factors that may facilitate or inhibit social exchange through platforms (i.e. ties, the identification with the community, shared vision, social values and personal norms). In addition, the studies tend to explore the phenomenon of collaborative consumption by recruiting users of specific accommodation sharing platforms (So et al., 2018, Min and Lu, 2017, Zloteanu et al., 2018, Amaro et al., 2018) or ridesharing providers, such as Uber (Boateng et al., 2019). With regards to the social and psychological outcomes of the sharing economy, the focus of the current literature is pitched at a macro level. Particularly, the literature discusses the effect on environmental sustainability and institutional change (Bonciu and Bâlgar, 2016, Retamal, 2017, Fremstad, 2017, Watanabe et al., 2017, Bachnik, 2016, Mair and Reischauer, 2017, Geissinger et al., 2018). However, it is lacking evidence related to perceived benefits, e.g. around interactions with other members/communities and also well-being.

The third gap refers to the users' perception of relations in the sharing economy. The determinants of perceived reciprocity in collaborative relations have not been explored. The research on organisation-employee relations provides some insight into the formation of reciprocity using the equity theory perspective (Fizel et al., 2002, Spencer and Rupp, 2009). Such a perspective provides a rational explanation for the evaluation of reciprocity, whereby people match someone's output (received rewards) and input (efforts and costs) with the output/input of other people (Adams, 1963). However, the perception of reciprocity from the perspective of personal benefit-maximisation cannot be applicable to the sharing economy context. Given the social interactions involved in sharing economy transactions, the use of sharing economy platforms is often conditioned by the objective to maximise the utility of products for the benefit of group peers, the society and the environment rather than oneself (Schneider, 2017). Hence, an examination of the social factors affecting the perception of

reciprocity is needed to reconcile the social and rational perspectives on reciprocity in the sharing economy.

Fourth, individuals' behavioural and cognitive responses following reciprocity perception in the sharing economy are under-researched. The literature in the sharing economy domain discusses the role of reciprocity in sustaining relations (Harvey et al., 2014b). However, there could be other emotional and behavioural consequences of the evaluation of reciprocity, which may trigger coping mechanisms aimed at downplaying negative outcomes of perceived nonreciprocity (Walster et al., 1973, Adams, 1963, Biron and De Reuver, 2013). Therefore, there is a lack of insight into such coping mechanisms, which follow the perception of reciprocity and how they contribute to the commitment of people to sharing economy platforms. Moreover, little is known about the role of situational and personal factors in the perception of reciprocity and the subsequent behavioural consequences of reciprocity evaluation. An examination of the moderating role of the value of exchange, which potentially affects the perception of relational consequences (Ha and Park, 2013), would explain the variance in the perceived outcomes of relations in the sharing economy.

To address the gaps in the literature, this thesis pursues four main objectives. Given the lack of a comprehensive review of the research on the sharing economy, the first objective is to provide a balanced analysis of the building blocks of the phenomenon. In line with this objective, the first research question is:

RQ1: How do the economic, social and technological streams of the literature study the sharing economy?

A systematic review of the literature using a quantitative content analysis methodology is conducted to provide a holistic picture of the resources exchanged in the sharing economy, applications, technical specifications of platforms, user motives, the expected and actual outcomes of collaborative consumption. The emerging themes in the literature are reviewed from the perspective of supply-side and demand-side users, as well as companies involved.

The second objective is to explore social and psychological underpinnings and implications of compensated and non-compensated collaborations in the sharing economy. This addresses the

gap about limited insight into the drivers and outcomes of the sharing economy. The following research questions will be answered:

RQ2: What are the factors of social exchange which may facilitate or inhibit the participation in the sharing economy?

RQ3: Does the participation in the sharing economy affect users' perception of the quality of life?

To address the first research question, the thesis adopts the Social Exchange Theory, which serves as a framework guiding the selection of the main groups of social and psychological factors driving users' participation in socially exchanged relations. To investigate the role of inhibitors and facilitators of social exchange, a comprehensive framework of structural, cognitive and relational social capital factors is utilised. The exploration of the three dimensions of social capital factors makes it possible to uncover the norms and expectations which motivate people to embark on transactions through platforms. To widen the implications of the research, the role of different types of social capital factors is examined across diverse sharing economy segments (e.g. carsharing, accommodation sharing, product-service exchange, peer-to-peer retail). The effect of the sharing economy on the user-perceived quality of life is measured by the correlation of use behaviour, social inclusion and subjective wellbeing. To understand the variance of the perceived outcomes depending on individuals' characteristics, the moderation effects of socio-demographic variables are examined.

The third objective of the thesis addresses the gap in the literature about the limited evidence on the users' perception of relations in the sharing economy. The thesis aims to examine the determinants of perceived reciprocity in the sharing economy and answer the following research questions:

RQ4: What factors affect the evaluation of reciprocity in the context of a social dilemma (i.e. individual rationality vs collective benefit maximisation)?

RQ5: How does perceived reciprocity differ depending on personality factors?

To examine how individuals evaluate perceive reciprocity, this thesis adopts the equity theory framework. This theory suggests the group of variables that can play a role in evaluating

input/output in the social exchange. To explain how individuals evaluate reciprocity in the context of social dilemma, equity theory variables are integrated with social factors. To understand the variance in perceived reciprocity depending on user personality, this thesis will examine the role of individuals' predisposition towards outcome maximisation and equity sensitivity in evaluating social exchange relations.

The fourth objective of the research is to examine cognitive and behavioural outcomes of perceived reciprocity. This objective fills the gap in the research lacking explanation as to how people feel and behave after the evaluation of reciprocity in sharing economy platforms. In line with this objective, the following research questions are proposed:

RQ6: What types of behaviours follow individuals' comparison of the outcomes against the contributions made to exchange relations?

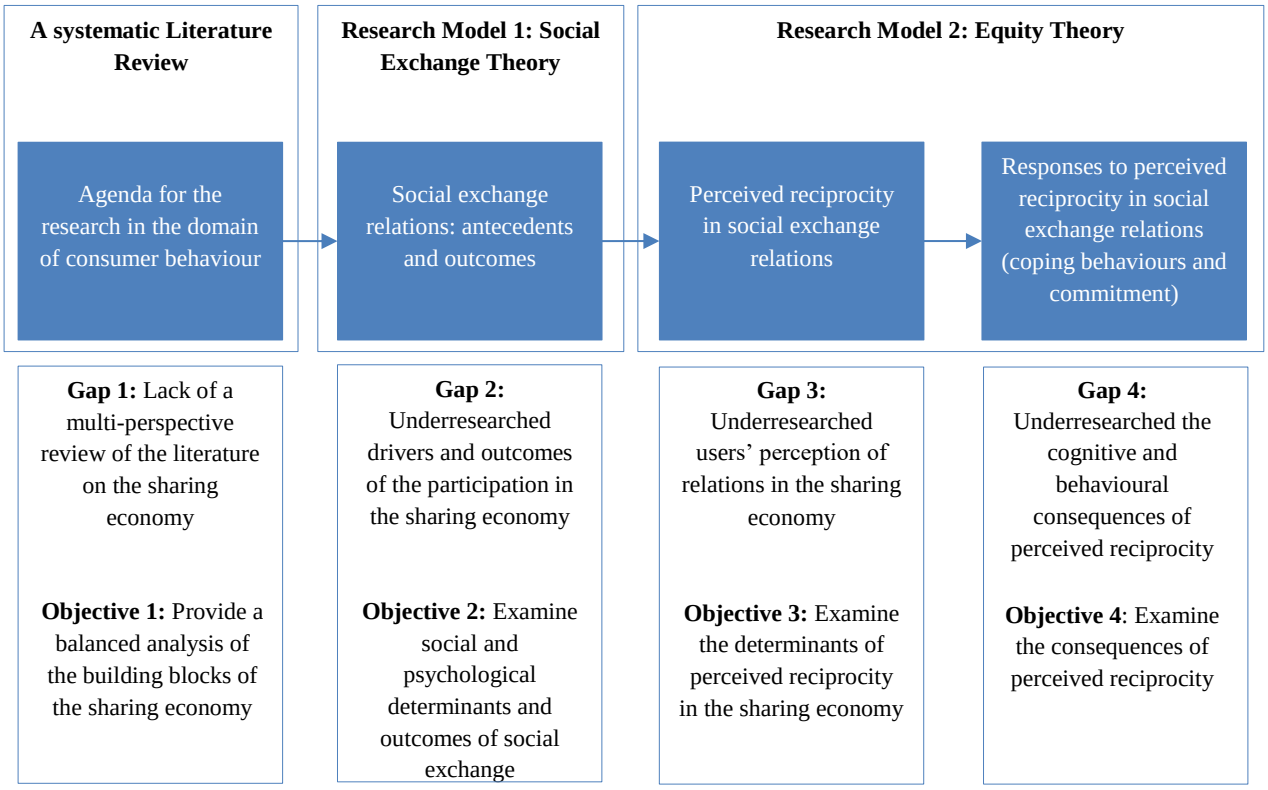
RQ7: How do personal and situational factors affect the strength of perceived reciprocity and subsequent cognitive and behavioural outcomes?

The thesis tests the effect of perceived reciprocity on commitment, emotion-focused and problem-focused coping mechanisms. This approach sheds light on coping strategies and their effectiveness in restoring the balance between input and output of exchange relations. The research examines the effect of the value of exchange, social influence, response efficacy and self-efficacy on the strength of perceived reciprocity, coping mechanisms and commitment.

To sum up, this thesis aims to provide an understanding of the main facets of consumer behaviour in the sharing economy by exploring the practices of social exchange and their antecedents, the evaluation of the reciprocity of social exchange and its consequences. Drawing on the systematic literature review and the gaps identified in consumer behaviour research, this thesis develops the first research model using the Social Exchange Theory. The aim of the research model is to provide an understanding of the user perspective on social exchange relations in the sharing economy, in terms of social and psychological antecedents and outcomes. The second research model is developed based on Equity Theory to provide an understanding of the processes following the participation in social exchange relations. First, it aims to provide an explanation of the determinants of perceived reciprocity in relations carried out on sharing economy platforms. Second, the model provides an understanding of the consequences of perceived reciprocity, such

as coping behaviours and commitment. Figure 1 illustrates gaps in the current literature, the objectives that this thesis pursues and contributions that each phase of the research makes to explain the consumer behaviour of sharing economy participants.

Figure 1: Research gaps, the aims, objectives and phases of the thesis.



1.4. Theoretical and Practical Implications

In seeking to fulfil the set objectives, this research makes four main contributions. First, the review provides a transformative agenda for the research in consumer behaviour. The multi-perspective review structures the growing body of diverse knowledge by delineating the social, economic and technological boundaries of the emergent phenomenon. This approach is different from other review papers which have been published to date, focusing mainly on the implications of the sharing economy in the tourism field (Dredge and Gyimóthy, 2015, Cheng, 2016, Cheng

and Edwards, 2019). The synthesis of the streams of the literature helps build a holistic picture of the sharing economy building blocks. The review of the research from the perspectives of users and companies provides the deeper meaning of implications borne by all stakeholders involved in sharing economy transactions.

Second, the findings contribute to the literature, which has limited insight into the social and psychological determinants and outcomes of the use of sharing economy platforms. The use of the framework of social capital factors makes it possible to disentangle the complexity of all the conditions facilitating and exhibiting social relations. The findings aim to provide a comprehensive and novel insight into the social and psychological variables affecting the users' motivations and shed light on discrepant findings on motives driving socio-economic relations (e.g. (Wasko and Faraj, 2005, Ellison et al., 2007, Kim et al., 2017, Lindblom et al., 2018, Min et al., 2018, Belk, 2010)). The results add to the stream of studies that have long been discussing the strength of community-oriented motives that support the concept of sharing economic relations, though without providing a comprehensive empirical examination (Ferrari, 2017, Whitham and Clarke, 2016). The examination of the research model recruiting users of diverse sharing economy platforms improves the external validity of the findings and the value of the research. In addition, despite the growing discussion on the macro-level changes brought about by the sharing economy (Bonciu and Bâlgar, 2016, Retamal, 2017, Fremstad, 2017, Watanabe et al., 2017, Bachnik, 2016, Mair and Reischauer, 2017, Geissinger et al., 2018), this thesis provides the first empirical evidence of the effect of collaborations on users' life satisfaction, perceived integration with the society and access to resources. The social perspective helps explore the degree to which the declared social benefits of collaborations in the sharing economy reflect the collective-oriented goals of collaborations. The findings of the research are particularly valuable for the stream of the research focusing on the implications of online systems for the well-being of society.

Third, this thesis makes a contribution to the literature, which is lacking empirical evidence about the factors underpinning the perception of reciprocity in the sharing economy. By adopting the equity theory framework, this research theorised the effect of justice perceptions, the personal and social groups of factors on the perception of reciprocity in sharing economy relations. Evidence that this research provides explains the relations preceding reciprocity perception in the

context of social dilemma, whereby actors may pursue both collective and self-interest. The examination of those variables reconciles the social and rational perspectives on collaborative consumption and tests the explanatory power of personal traits.

Fourth, this thesis contributes to the research on the individuals' behavioural and cognitive responses following reciprocity perception in the sharing economy (Harvey et al., 2014b). The findings offer an explanation of the factors determining the commitment of people to sharing economy platforms. The examination of the effect of reciprocity perception on relationship commitment through emotion-focused and problem-focused coping sheds new light on the application of equity theory. This approach explores coping mechanisms which follow the perception of reciprocity, and explains how they contribute to the commitment of people to sharing economy platforms. The knowledge that the research provides is important considering evidence about the role of commitment in determining people's loyalty to relations (Dagger et al., 2011). The findings help understand what behaviours someone embarks on to ensure commitment and potentially sustain long-term collaborations in platforms. In addition, this research examines the moderating effects of situational and personal factors on the relationships between perceived reciprocity, its determinants and cognitive/behavioural outcomes. An examination of moderation effects is important, as it gives a richer insight into the dependence of reciprocity evaluation and commitment on situational conditions and explains possible variations in the predictive strength of the examined variables.

From a practice perspcetive, the results provide an insight into the psychological patterns of the sharing economy users, which might help regulate relations and increase engagement. The research could be of interest for policymakers. The results on the potisive outcomes of the sharing economy may equip policypmakers with evidence that can be set against the discussions on potential socio-economic disruptions incurred by the sharing economy. Also, the findings of the effect of reciprocal relations on commitment can inform practitioners on how to ensure the loyalty of the users of sharing economy platforms. Finally, evidence about the role of determinants of perceived reciprocity may suggest which customer relationship tools and channels to use to ensure the perceived fairness of customers' treatment.

1.5. Structure of the Thesis

The thesis comprises eight chapters. The current chapter is the introduction, which provides generic information about the topic of the thesis, gives insight into the prior research on consumer behaviour in the sharing economy, summarises gaps, aims and objectives, as well as theoretical and practical contributions of the research. Chapter 2 is dedicated to a review of the literature on the sharing economy. With the purpose of providing a comprehensive analysis of the papers published to date, the thesis takes a systematic (a quantitative content analysis) approach. The chapter provides the findings of the systematic synthesis of the literature across three domains – i.e. the research taking economic, social and technological perspectives when examining the sharing economy. The concluding section of the chapter provides a summary of the findings, gaps and future research agenda. Chapter 3 is about the theoretical foundation and a research model, which is proposed 1) to examine the psychological underpinnings of compensated and non-compensated collaborations in the sharing economy and 2) to gather the first-hand data about the impact of sharing economy platforms on the user's life. Chapter 4 provides the theoretical justification and a research model to fulfil the objectives of the thesis with the aims: 1) to examine the determinants of perceived reciprocity in the sharing economy and 2) to examine cognitive and behavioural outcomes of perceived reciprocity. Chapter 5 discusses the methodological approach adopted by the thesis, reflecting research philosophy, research methods, data collection and sample selection techniques, measurements and data analysis approach and tools. Chapter 6 reports the results and findings of the thesis. Chapter 7 focuses on a discussion of the findings inferred as a result of the examination of the two research models. Chapter 8 is a concluding chapter, discussing the theoretical and practical contributions of the research findings, limitations and future research suggestions.

2. Literature Review on the Sharing Economy

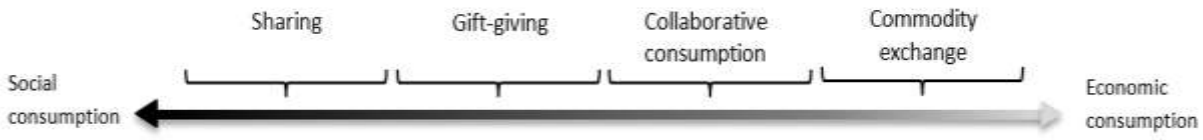
The interest of the academic community in the disruptive powers of the sharing economy has increased exponentially over the past five years. The topic evolved into a diverse body of knowledge that reflects the complexity of the sharing economy, covering the patterns of social interaction, economic transactions and technological attributes of this topical phenomenon. Such a rapidly developing field lends itself to being reviewed in a structured manner, in order to explore the emerging themes. This review's objective is to offer a balanced analysis of the building blocks of the sharing economy, to identify emerging themes within each stream of the literature, to discuss any contextual differences and to propose directions for the research. Given the recent social trends towards a sustainable lifestyle and the capacity of the sharing economy to promote it (Hong and Vicdan, 2016), a multi-perspective approach (economic, social and technological) will make it possible to grasp the profound meaning of the dimensions of this emerging phenomenon. The following sections will explain the methodology used for systematically reviewing the literature, present results and discuss findings.

2.1. Definition and Conceptualisation

Collaborative practices performed in the sharing economy can be defined using Belk's (2014) conceptualisation of sharing, Botsman and Roger's (2011) definition of collaborative consumption and the definition of a peer-to-peer economy by Hamari et al. (2015). Although all three terms are used to explain the same phenomenon, they have different approaches to represent collaborative practices. Belk (2014) defines collaborative consumption as "*people coordinating the acquisition and distribution of a resource for a fee or other compensation".* The author differentiates collaborative consumption from gift-giving, sharing and commodity exchange by positioning it along the social – economic continuum (Figure 2). *Ownership extension, ownership transfer* and *compensati*on are employed to delineate the boundaries of social and economic practices (Belk, 2010; Belk, 2014). However, the concept *ownership* can be confusing, because it refers to accessing a resource rather than permanent ownership. *Ownership extension* refers to access to a resource for collective use by its owner and temporary consumers, whereas *ownership transfer* refers to access to a resource for temporary use only by consumers. In some of the literature, the temporary use of a resource by the second party is referred to as an access-based

consumption (Bardhi and Eckhardt, 2012). This term emphasises the lack of joint possession over the sharable object. The third concept is *compensation*. This denotes an economic or utilitarian reward for access to a resource. Unlike compensated practices, the resources can be shared on the basis of *generalised reciprocity*, which does not imply immediate obligation or expectation of return (Sahlins, 1974). Following Belk's conceptualisation, true *sharing* represents the practice under which a resource is collectively used by its possessor and consumers without compensation. During *gift-giving* the ownership is permanently transferred to another person for free. In contrast, *commodity exchange* enables temporary access to a resource for a fee (Acquier et al., 2017, Belk, 2014, Belk, 2010). *Collaborative consumption* occupies a middle ground between the economic transactions of commodity exchange and a social act, like sharing and gift-giving. Unlike sharing, gift-giving and the commodity exchange dichotomy, the ownership and compensation one is not effective in classifying collaborative consumption. Rather, collaborative consumption captures various compensated and non-compensated practices representing temporary access to a resource for collective and individual use, temporary exchange of goods, and permanent transfer of second-hand resources (Belk, 2014; Bardhi and Eckhardt, 2012).

Figure 2: Socio-economic continuum of sharing economy practices



Botsman and Rogers (2011) define collaborative consumption as an "*economic and cultural model based on systems of organised sharing, bartering, lending, trading, renting, gifting and swapping*". The adoption of this approach puts compensated consumption, like bartering, trading, renting and lending, and non-compensated collaborative practices, like gift-giving and sharing, under one umbrella. Reflecting this definition against the conceptual boundaries proposed by Belk (Belk, 2010), collaborative consumption denotes practices that can be referred to as both gift-giving and commodity-exchange, thus misusing the concept. In contrast to Belk (2010) and

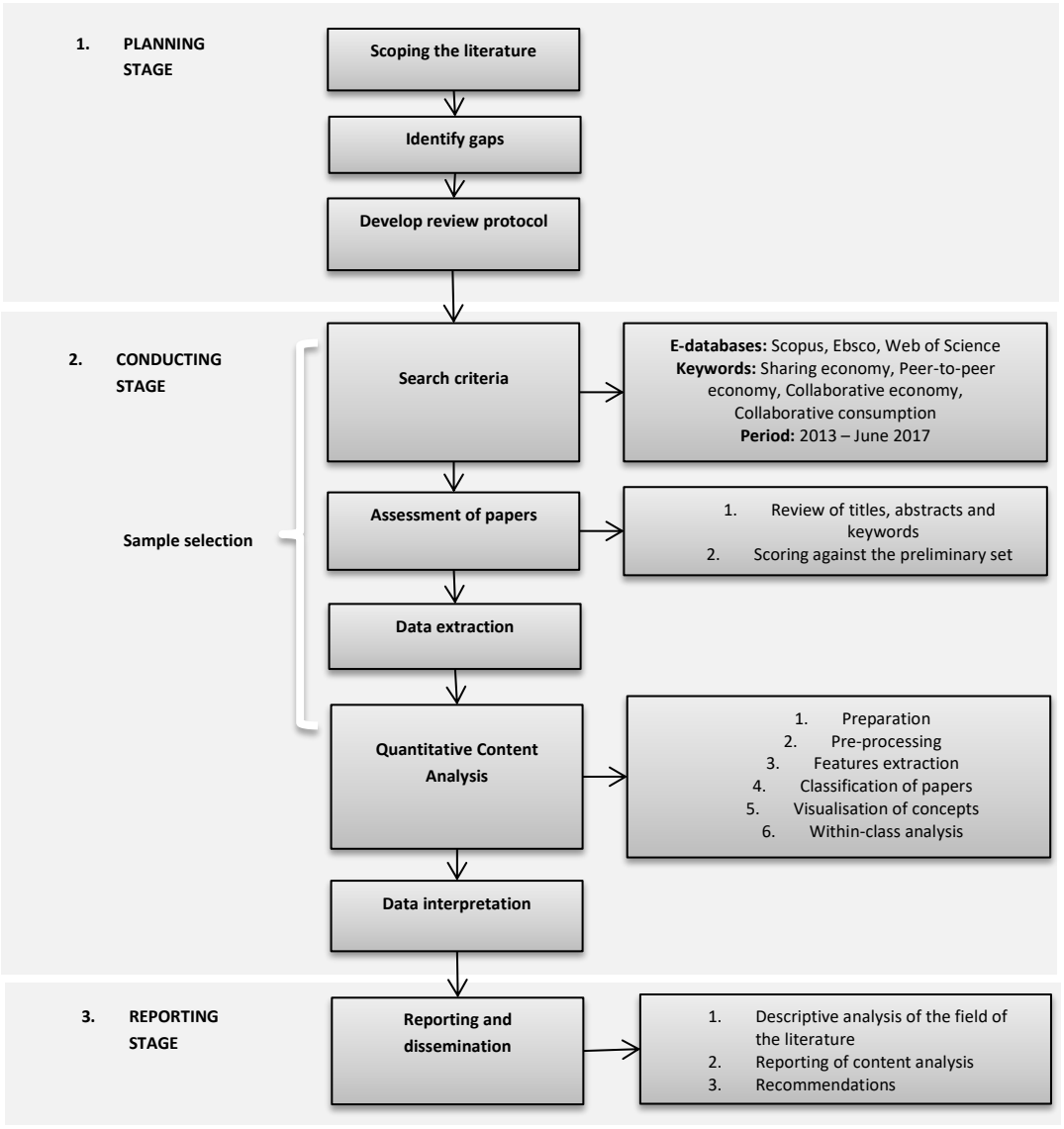
Botsman and Rogers (2011), Hamari et al. (2015) defined collaborative consumption as a "*peer-to-peer based activity of obtaining, giving, or sharing the access to goods and services, coordinated through community-based online services*". It focuses on the activity taking place specifically within a digital peer-to-peer environment. The aforementioned definitions bring to light the fundamental characteristics of the sharing economy, which are: a) the nature of practices (social interaction or economic transaction), b) the type of reciprocation for access to a resource (generalised or compensated), c) the context, where practices are performed (market-based or communal environment) and d) the role of technology enabling the collaboration between parties. These characteristics contributed to the classification of the literature into economic, social and technological streams.

The fragmentation of perspectives may challenge research about consumer engagement when it comes to sharing economy benefits, user perceived drivers, barriers, attitudes and intentions. Also, unbalanced research potentially hampers the development of platforms for different user levels and markets, as well as undermining their implications for people's life and environment. However, no research has been undertaken to bridge the economic, social and technological perspectives, and shape the holistic picture of the sharing economy. The published research revolves around collaborative consumption practices, such as tourism, a shared mobility and a garment sector (Dredge, 2015; Chen, 2016; Chan and Edwards, 2017; Santos, 2018). In addition, scholarly works debate the impacts of the sharing economy. This is seen as the "Pandora's box" for sustainability, markets and institutions (Duran-Sanchez 2016; Morgan, 2018; Ganapati and Reddick, 2018). The speculations are rooted in the uncertainty of the nature of the phenomenon and what it may hold. The literature can benefit from a timely analysis directed towards the reconciliation of the research streams and a deeper understanding of all facets of the sharing economy. These will make it possible to inform future research and identify the advantages that the sharing economy holds. Therefore, a comprehensive multidimensional quantitative analysis of published research on the sharing economy was conducted. The following sections introduce the methodological approach adopted by the thesis and provide a discussion of the key concepts in each stream of the literature.

2.2. Mapping and analysing the sharing economy research quantitatively

This thesis adopted a three-stage process of systematising the review of the literature (Tranfield et al., 2003) when it came to the planning and conducting the work and reporting the findings, with the aim of increasing the replicability of the review procedures, transparency and the scientific value of the findings. The following sections explain the procedures conducted during each stage, as shown in Figure 3.

Figure 3: Summary of the literature review process (adapted from Tranfield et al. (2003)



2.2.1. Stage 1: Planning Stage

The planning stage included the phases of scoping the literature, identifying gaps and developing the review protocol (Tranfield et al., 2003). The preliminary scoping of articles was undertaken in order to delineate the boundaries of the subject area, grasp the perspectives that had previously been tackled, explore the methodological approaches and discussions about the practical implications of the research. The iterative process made it possible to comprehend the heterogeneity of the conceptual underpinnings and disciplinary perspectives that had not been addressed in published review papers. After identifying gaps, the review protocol was developed. This aimed at guiding the phases of sample selection, data analysis and interpretation discussed below.

2.2.2. Stage 2: Conducting Stage

Sample selection

The conducting stage of the review started with sampling the literature. This step included the development of search and selection criteria, the assessment of the relevance of articles, based on pre-defined criteria and the data extraction (Tranfield et al., 2003). First, in order to ensure wide coverage of the topic the three biggest electronic databases, Scopus, Ebsco and Web of Science, were used. Search inclusion criteria were identified, aiming to generate a broad spectrum of literature, which justified the imposing of limited restrictions in the search procedure. The literature search revolved around using "*sharing economy*" as the keyword and its synonym terms, such as "*peer-to-peer economy*", "*collaborative economy*" and "*collaborative consumption*". The terms originated from widely-cited definitions that were used interchangeably in the literature to define the constellation of sharing and collaborative practices mediated by technology (Hamari et al., 2015, Belk, 2014, Botsman and Rogers, 2011, Lessig, 2008). The publications were limited to articles, reviews, papers in press and editorials available in the English language. The first papers under the headline of the sharing economy came to light in 2013, which justified the search restriction to papers published during the period from 2013 till 2018. Given the focus of the literature, restrictions on research fields were not set, thus enabling multidisciplinary perspectives to be explored. The search resulted in 446 papers, 233 of which were from Scopus, 136 from Web of Science and 77 from the Ebsco electronic databases. After

the removal of duplicates across databases the number was reduced to 315 articles, with 273 papers available for downloading. During the second phase, the titles, abstracts and keywords of the papers were reviewed by the three reviewers in order to increase inter-rater reliability. Papers were scored 0 or 1 depending on the reviewer's perception of the relevance to the topic and those papers ranked with the highest (3) were included in the review. As a result of the evaluation stage, in the fourth step 149 articles were downloaded for review.

Quantitative Computer-Assisted Content Analysis

A quantitative content analysis method was adopted, aiming to objectively and systematically describe the variables and explore the relations among them (Riff et al., 2013). QDA Miner, a content analysis software, with its extension Wordstat module were used at this stage, making possible a wide range of exploratory data analysis. That made it possible to deduce statistically significant concepts (represented by words) and themes (groups of concepts) in the literature discourse, thus increasing the replicability, objectivity and generalisability of the research design and findings (Riff et al., 2013). The quantitative content analysis was conducted in 6 steps: 1) the preparation of documents for analysis, 2) pre-processing, 3) features extraction based on the analysis of the entire literature, 4) the classification of documents, 5) visualisation of concepts discussed in the entire literature and 6) running the analysis of each stream of the literature. Having added documents into the software, preparation and pre-processing procedures were required to improve the accuracy of the results. The preparation step included the spell-check of the text, the removal of hyphens, square brackets and braces that could interrupt the structure of sentences and paragraphs and lead to misleading findings. The pre-processing procedure enabled lemmatisation, which featured automatic correction of misspellings and the substitution of concepts with word forms that had identical roots. In addition, the pre-processing required a manual check of the frequency list to exclude concepts not relevant to the study (Davi et al., 2005). In the third step, the content analysis was applied to 149 papers in order to select a subset of features reflecting all-embracing dimensions of the discourse about the sharing economy, such as: a) user practices, b) the context where practices took place, c) the forces enabling practices, d) sharing economy impact, and e) technology attributes. Then the features were manually categorised, based on their relevance to social, economic or technological classes (Davi et al., 2005). The features were analysed within the textual environment from which they had been

derived to validate the semantic relevance to the three classes. For the classification of documents an instance-based classification method was used that refers to supervised machine learning classification techniques, performed through manual categorisation of documents followed by computer-assisted cross-validation of the classifiers (Kotsiantis et al., 2007). The manual categorisation of documents was conducted by cross-tabulating classified features against documents to produce the frequency list of classified features for each document. This process made it possible to assess the tendency of the document to fit a particular class and assign the class of dominant features to a document (Davi et al., 2005). The discriminative capability of the features was evaluated by a correlation test (Max Chi-square) that computed the highest co-occurrence value of the feature in one class against all other classes. As a result, manual classification of each feature was verified by an automatic class prediction and statistically confirmed by the p-value. Table 1 illustrates a subset of features that represents the classifier for all documents. To cross-validate the accuracy of the classifier *k*-Nearest Neighbour (kNN) method was used, which worked on the principle that instances (classified features) of *k* dataset existed in close proximity to the instances of other documents (Kotsiantis et al., 2007). Based on this classifier the class of papers with an economic perspective comprised 73 papers, a social perspective 56 articles and a technological one 20 papers.

Table 1: Feature selection for classification

Class Prediction	Name	Max Chi^2	P
Economic	Pricing	33.35	0.00
	Insurance	15.59	0.00
	Transaction_Cost	10.96	0.00
	Retail	10.36	0.00
	Shortterm_Rental	9.81	0.00
	Competitor	9.29	0.00
	Business_Model	8.41	0.00
	Liability	7.57	0.01
	Regulation	4.63	0.03
	Economic_Benefit	4.62	0.03

	Cost_Saving	4.00	0.05
	Purchase_Intention	2.97	0.08
Social	Reciprocity	22.04	0.00
	Community	21.08	0.00
	Norm	20.96	0.00
	Social_Exchange	13.06	0.00
	Sustainability_Consumption	9.05	0.00
	Voluntary	7.49	0.01
	Social_Connection	6.73	0.01
	Community_Building	6.47	0.01
	Social_Space	6.44	0.01
	Social_Capital	6.37	0.01
	Grassroots_Innovation	4.94	0.03
	Social_Relation	4.70	0.03
	Utopian	4.66	0.03
	Social_Relationship	4.38	0.04
	Psychosocial_Wellbeing	3.97	0.05
	Design	3.76	0.05
	Social_Practice	3.30	0.07
	Generalize_Exchange	3.12	0.08
Technology	Rating_Prediction	23.07	0.00
	Urban_Mobility	23.07	0.00
	Algorithm	15.14	0.00
	Virtual_Reputation	11.45	0.00
	Recommendation_System	9.74	0.00
	Gig	6.23	0.01
	Infrastructure	4.52	0.03
	Smart	4.21	0.04
	Labor_Market	2.77	0.10

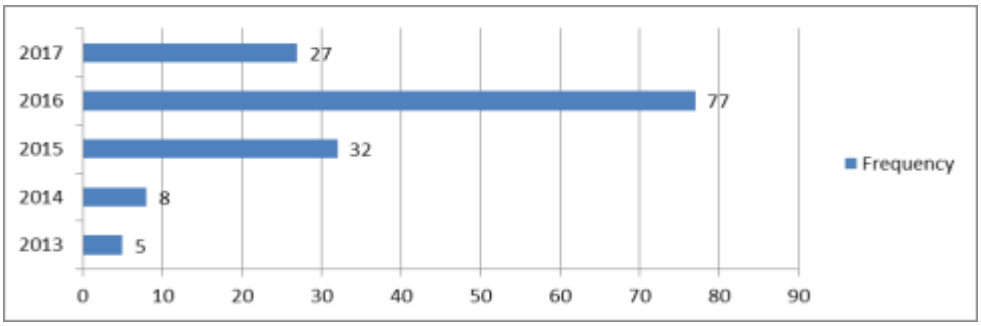
In the last steps of the quantitative content analysis concept mapping, frequency extraction, and proximity plotting of the literature were undertaken. Concept mapping and proximity plotting were performed through the co-occurrence analysis of two words, based on Jaccard's Index (JI)

similarity coefficient defined as $J = a/(a + b + c)$, where a is a paragraph of the document in which both words occur, and a , b and c represent the paragraphs where one of the words occur, but not the other (Tan, 2006). Concept map analysis was applied to 149 articles with the purpose of visualising key themes discussed in the literature and defining the attributes (represented by concepts) of the sharing economy that underlined those themes. Then, the frequency analysis of each stream of the literature was run to manually group the derived attributes based on pre-defined categories. The deconstruction of the themes discussed in the literature into attributes and the adoption of the pre-defined categories is justified by the goal of analysing the usage of the concepts in the three contexts (social, economic and technological) and infer the latent meaning (Hsieh and Shannon, 2005). The content analysis allowed us to describe, explain and compare theoretical differences between the economic, social and technological perspectives. The undertaken analyses became a reference point for further qualitative interpretation and comparison of findings in order to examine the contextual conditions of the variables and cases being investigated. A comparative analysis in this review was justified, since it is predominantly utilised for the analysis of secondary data, including theoretical papers, results of empirical work and reports of practitioners (Ragin, 2014). The goal of the proximity plot was to visualise the relationship between the *user* and *intermediary* clusters and the derived categories of concepts. It illustrated the user perspective that the research took in discussing the topics.

2.2.3. Reporting Stage

The third stage aimed to report the key findings, identify gaps and offer recommendations for future research. The descriptive analysis of the research field provided explicit statistics about the year of publication and methodological approaches adopted by the reviewed papers. Figure 4 suggests that there has been an exponential growth of published work in this area over the past few years.

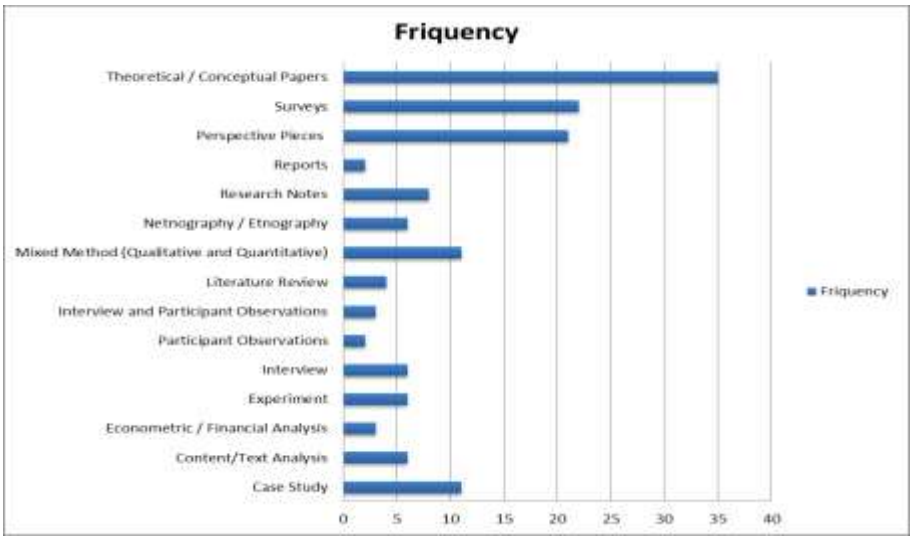
Figure 4: Year of publication of selected papers



Among the selected papers, there were 35 studies that theorised the topic from different perspectives, 22 survey-based studies, 21 perspective pieces, 11 papers adopting a mixed-method design and 11 case studies. The review selection also included the papers that adopted a netnography/ethnography design, interview, experiment and content analysis, each of which accounted for 6 studies. The least number of articles employed the participant observations method, econometric or financial analysis and reports (Figure 5).

The results, findings and recommendations based on quantitative content analysis of the selected literature follow in the sections below.

Figure 5: Research Methodologies adopted by the selected papers



2.3. Findings

2.3.1. The Concept Map of the Sharing Economy Literature

Figure 6 presents the concepts that underlie the themes discussed in the literature about the sharing economy. The concepts are automatically clustered and coloured based on whether or not they belong to a particular theme (foci of discussion). The concept map illustrates six main foci of discussion in the literature, related to *customer benefits, Uber drivers, carsharing, reciprocity, sustainability* and *institutional change*. They are represented by clusters of red, green, pink, lilac, beige and blue.

The *customer* cluster is the largest cluster by the number of concepts and the size of the bubbles, indicating the frequency of the concepts reoccurring in the literature. The customer concept is central on the map, linked with the concepts from other clusters. This concept is closely related to terms such as benefits, the purchase of goods and products, behaviour, experience and the concepts relating to accommodation sharing (e.g. Airbnb, Couchsurfing, travel, host, hotel). These relationships imply several streams of the research. First, the literature discusses the benefits that consumers get from redistributing goods through the platforms. Secondly, the published research examines the use of accommodation sharing platforms as a guest or host. The accommodation theme has two adjacent narratives. The first narrative illustrates the scope of research about peer-to-peer apartment renting, the services that suppliers of the alternative hospitality market offer to hosts, and the effect on the revenue of traditional hotel chains (Aznar et al., 2017, Richard and Cleveland, 2016). Further analysis of semantic proximity and link strength between concepts indicates the second narrative about the role of alternative accommodation in tourism, and the focus on the experience of guests (Tussyadiah and Pesonen, 2016). Thirdly, the papers focus on the behaviour of sharing economy platform customers in terms of the perceptions and intentions they have, which drive the purchase of goods and products via platforms. Studies examine the factors that underlie the perception of the value of commercial sharing and their influence on pre-purchase intention, purchase behaviour and post-purchase satisfaction (Liang et al., 2017, Tussyadiah and Pesonen, 2016, Hwang and Griffiths, 2017). The *Uber driver* cluster includes the key concepts, such as legal, regulation, employment,

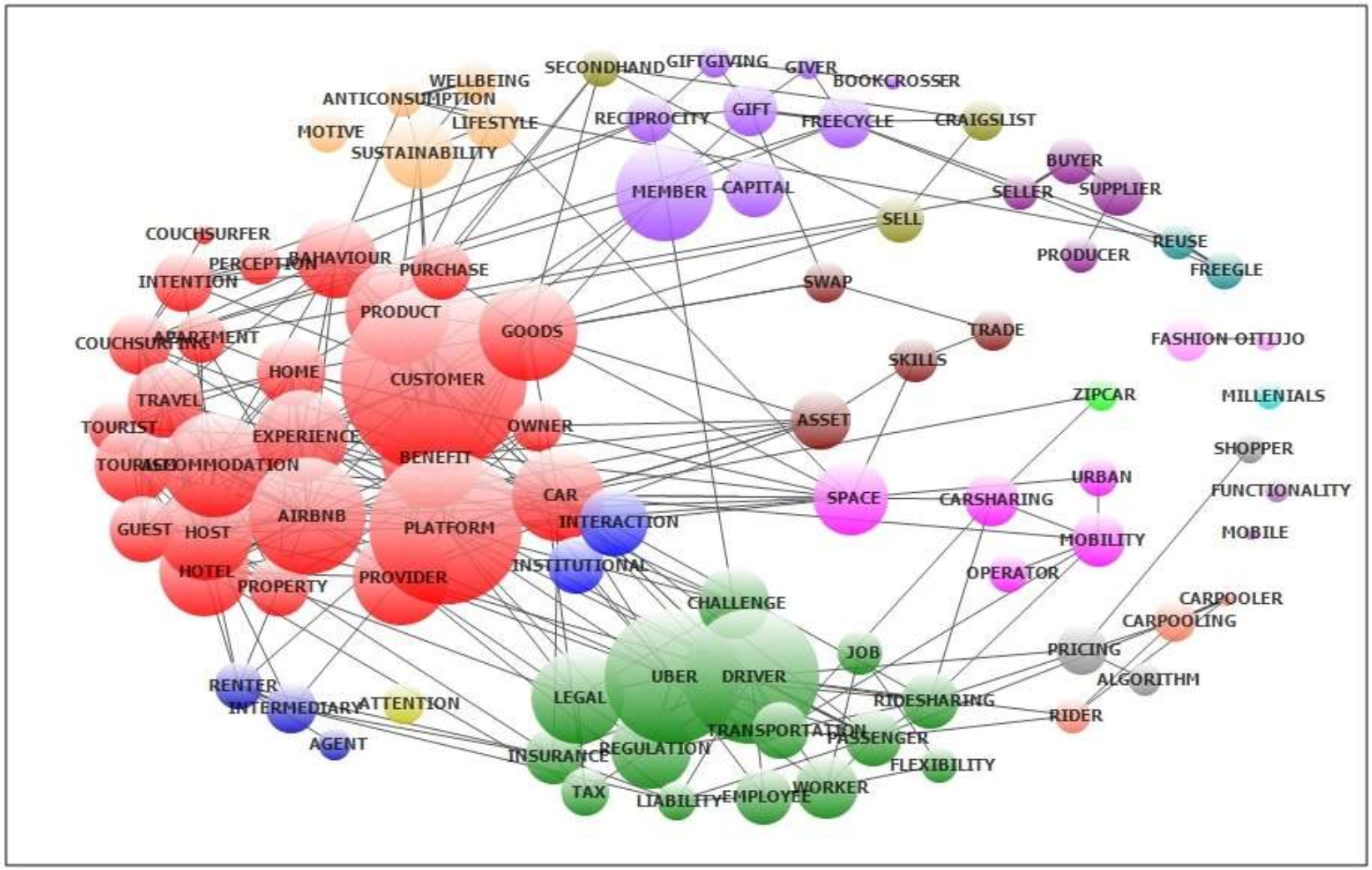
job and flexibility, which point to employment opportunities and benefits, as well as the regulatory implications that the ridesharing form of transportation entails. Decentralised and non-standardised governance in ridesharing systems fuelled discussions about the regulatory challenges related to *liability*, *tax* and *insurance* (Redfearn Iii, 2016, Posen, 2015, Doménech-Pascual, 2016, Pfeffer-Gillett, 2016). The *carsharing* cluster focuses on the form of practices, whereby people do not share the ride, as when they use Uber, but share a car for any form of compensation (BÁLINT and TRÓCSÁNYI, Ballús-Armet et al., 2014). The *reciprocity* cluster demonstrates a discussion that is going on in the literature about gift-giving practices, which is the form of resourc redistribution that is carried out without obligation to reciprocate (Matteo and Daniele, 2014, Skågeby, 2010). The *sustainability* cluster includes concepts such as lifestyle, motive, anticonsumption and wellbeing. This cluster indicates a) the studies that examined sustainability motives, driving the participation in the sharing economy, and b) the literature that highlighted the change in the consumer mind-set and lifestyle towards the sustainable use of resources – i.e. anticonsumption (McArthur, 2015, Kim et al., 2015, Hong and Vicdan, 2016, Aptekar, 2016). *Institutional change* is described as a consequence of industrial transformation, conditioned by the introduction of the non-ownership model and the entry of new players (King, 2015, Laurell and Sandström, 2016).

Based on the analysis and the review of derived concepts, they were manually grouped into 5 categories: 1) *practices of consumption* 2) *resources and implications*, 3) *user engagement*, 4) *consequences* and *5) stakeholders (supply-side/demand-side users and intermediaries)*. The category *practices of consumption* embraces the concepts defining joint activities related to resource acquisition and distribution among peers (Belk, 2014). The r*esources and implications* category refers to a wide range of goods exchanged among users for compensation of for free within the context of alternative markets (e.g. transportation, accommodation, retail etc.)(Botsman and Rogers, 2011, Belk, 2014). The category *user engagement* includes the variety of constructs and variables related to technology, market and personality that underline users' participation in the sharing economy (e.g. (Ndubisi et al., 2016, Tussyadiah and Pesonen, 2016, Gullstrand Edbring et al., 2016, Hwang and Griffiths, 2017)). The *consequences* category covers the challenges that the emergence of the sharing economy model has brought into the market, business, ecology and the consumer's life (e.g. (Bonciu and Bâlgar, 2016, Retamal, 2017, Fremstad, 2017, Watanabe et al., 2017)). *Users* are divided into *supply-side and demand-side*

users. *Supply-side users* provide resources, such as hosts renting out flats in the P2P accommodation market or car owners engaging in car sharing practices (e.g. (Ballús-Armet et al., 2014, Posen, 2015, Fremstad, 2017, Birdsall, 2014, Germann Molz, 2013, Oskam and Boswijk, 2016)). *Demand-side users* acquire resources, such as apartment renters or buyers participating in retail transactions (e.g. (Tussyadiah, 2015, Esben Rahbek Gjerdrum and Sarah, 2015, Hartl et al., 2016, Gullstrand Edbring et al., 2016)). *Intermediates* refer to platforms and companies that connect the two user groups, by representing the producers of services and goods to consumers (e.g. (Tham, 2016, Fremstad, 2017, Laurell and Sandström, 2016, Aptekar, 2016)).

The next sections will present high-frequency concepts of the categories *practices of consumption, resources and implications, user engagement* and *consequences* discussed in the literature adopting economic, social and technological perspectives. The review will not present findings about the *demand-side users*, *supply-side users* and *intermediaries* concepts in a separate section, because they are discussed in relation to the concepts of other categories. Instead, they will be juxtaposed against the concepts of emerging themes that will make it possible to explore users' and platforms' perspectives in examining consumption practices, the acceptance and impact of the sharing economy.

Figure 6: The concept map of the literature



2.3.2. Economic Perspective

Table 2 presents the attributes of the sharing economy that are widely-discussed in the literature, represented by the frequency value, the percentage of processed terms calculated against the total number of words in the analysed documents and TF-IDF weight (the weighted term frequency adjusted against the inverse document frequency, containing this term). Published works revolved around the applications of the sharing economy in the transportation, accommodation, fashion and retail sectors. In particular, they discussed compensated practices of the trading, selling and purchasing of goods and second-hand products, exchanging apartments, as well as sharing cars and common property. The economic and utilitarian dimensions of the sharing economy are credited to the technological premises that drive the phenomenon. The economic efficiency of technology-mediated transactions represents the main stimuli of user engagement, which furthers the expansion of sharing platforms. The literature also debated the impact of the phenomenon on people and the global market in general.

Table 2: The frequency of the main concepts in the literature underpinned by the economic perspective

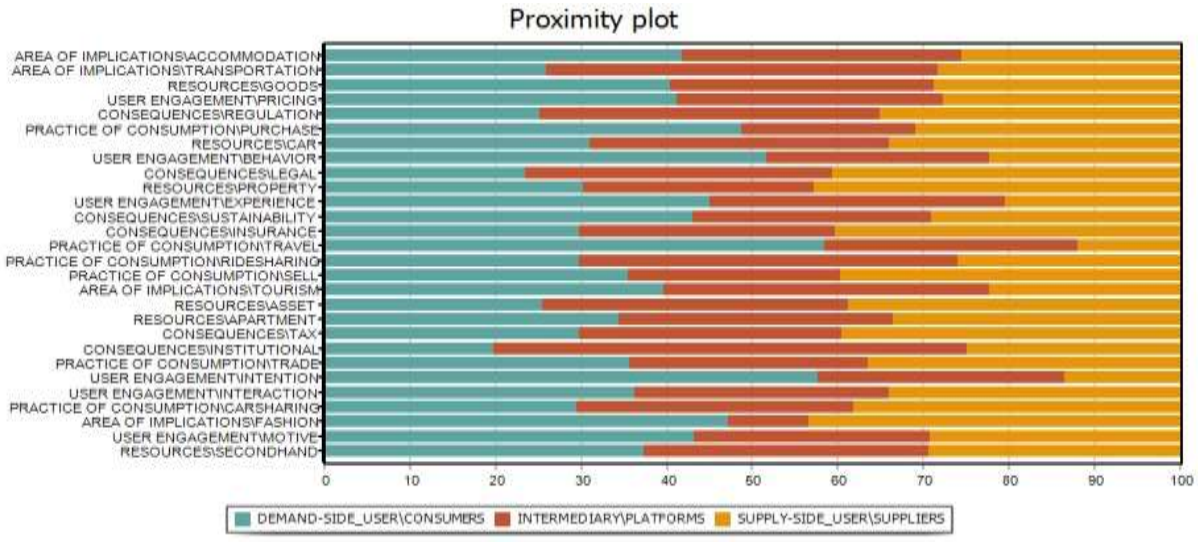
	Frequency	% Processed	Tf • Idf
Stakeholders			
Demand-Side User			
Consumer	1248	0.99%	0
Customer	320	0.07%	52.6
Buyer	220	0.04%	114.6
Guest	149	0.03%	83.8
Passenger	142	0.03%	71.2
Renter	106	0.02%	67.1
Tourist	103	0.02%	60.2
Millennials	75	0.02%	94.6
Shopper	75	0.02%	104
Supply-Side User			
Provider	708	0.14%	122.6
Supplier	601	0.12%	64.6

Host	323	0.07%	120.1
Employee	272	0.06%	109.1
Owner	184	0.04%	35.2
Seller	52	0,04%	33,4
Intermediary			
Uber	1421	0.29%	312.4
Platform	1376	0.28%	97.6
Airbnb	780	0.16%	60.8
Intermediary	213	0.04%	111
Craigslist	156	0.03%	181.6
Operator	109	0.02%	56.8
Zipcar	83	0.02%	46.7
Practices Of Consumption			
Purchase	443	0,09%	47,6
Ridesharing	265	0,05%	110,3
Travel	258	0,05%	76,1
Carsharing	251	0,05%	135,8
Sell	189	0,04%	37,9
Trade	151	0,03%	37,8
Resources And Implications			
Goods	1495	0,30%	36,6
Car	722	0,15%	83,1
Assets	261	0,23%	52,3
Property	218	0,19%	33,1
Apartment	148	0,03%	63,9
Secondhand Products	120	0,02%	109,1
Areas Of Implications			
Accommodation	1557	1.36%	203.9
Transportation	1033	0.91%	152.2
Tourism	298	0.26%	167.6
Fashion	178	0.16%	117.3
User Engagement			
Pricing	746	0,65%	42,6
Experience	319	0,28%	47
Behavior	284	0,25%	68,2
Social Interaction	168	0,15%	45,7
Motive	155	0,03%	59,9

Intention	141	0,12%	79,3
Consequences			
Regulation	1110	0,04%	64,5
Legal	842	0,04%	45,3
Sustainability	684	0,02%	66,9
Institutional Change	340	0,07%	158,2
Insurance	266	0,05%	75,4
Tax	194	0,17%	202,1

Figure 7 presents the proximity plot of the categories *supply-side users, demand-side users* and *intermediaries* with high-frequency concepts of retrieved clusters. The colours of the bars demonstrate the tendency of the literature to associate concepts with either consumers, suppliers or platforms. The plot demonstrated that the *resources*, *trade* and *tourism* concepts have been examined from all stakeholders' perspectives. The *consumers'* perspective underpins discussions about *user engagement* factors, *travel* and *purchase* practices within the *accommodation* sector. This reflects the tendency of the research to examine factors driving resource acquisition as opposed to their distribution. Given the economic conceptualisation of the sharing economy, the literature discussed its institutional and economic implications, mainly affecting *intermediaries* and *suppliers* in the *transportation* sector.

Figure 7: Proximity plotting of the categories users and intermediaries with practices, resources, consequences and user engagement.



2.3.3. Practices of consumption

Collaborative Trading: Collaborative trading resembles market-based transactions, under which temporary access to a service, permanent transfer and exchange of resources are compensated (e.g.(Ballús-Armet et al., 2014, Posen, 2015, Retamal, 2017, Fremstad, 2017)). For example, *trade* practices appear in the literature as channelled through unmediated (peer-to-peer) and mediated monetary exchanges. Trade is carried out through listings such as Craigslist, product-service systems (PSS), virtual accommodation marketplaces and online repositories of fashion items, referred to as fashion libraries (Fremstad, 2017, Esben Rahbek Gjerdrum and Sarah, 2015, Retamal, 2017, Karlsson et al., 2017, Hamari, 2013). Unmediated *selling* and *purchasing* through Craigslist represents the consumption, where terms and conditions are not moderated by the platform (Ertz et al., 2016, Fremstad, 2017). The practices result in profit maximisation made possible by the permanent transfer of the goods and services used from suppliers to consumers. Suppliers benefit from compensation for recirculating (selling and reselling) personal items in a consumption stream. Consumers' incentive to purchase second-hand items is encouraged by the reduced cost of an item (Ertz et al., 2016, Fremstad, 2017). Trading in product-service systems enables an individual use of services through access to platforms. This form of consumption substitutes for the purchase of a physical item by the rent of the service that the item produces (Retamal, 2017). Another form of trading is carried out through mediated peer-to-peer accommodation platforms, such as AirBnb, and garment renting platforms (Karlsson et al., 2017, Belarmino et al., 2017, Oskam and Boswijk, 2016, Esben Rahbek Gjerdrum and Sarah, 2015, Pantano and Stylos, 2020). These types of platforms make it possible to redistribute underused property and assets among consumers (Belarmino et al., 2017, Esben Rahbek Gjerdrum and Sarah, 2015, Pantano and Stylos, 2020). An intermediary actor controls the price of the temporary exchange of goods and becomes the third beneficiary of collaborative practices (Ertz et al., 2016). Intermediaries are responsible for marketing suppliers' offerings and matching them with consumers' needs. Considering profit incentives, companies implement recommendation systems, supplier reputation and ranking features to increase the reliability and safety of platforms (Karlsson et al., 2017, Fagerstrøm et al., 2017).

Collaborative Transport Practice: Recently, scholars have become increasingly interested in for-profit *ridesharing* that is carried out through mediated and unmediated systems. During mediated ridesharing passengers acquire temporary use of a ride-service provided by the drivers of cars (Shaheen et al., 2016, Watanabe et al., 2017, Sinclair, 2016, Ballús-Armet et al., 2014, Guyader, 2018). The best-known example of mediated ridesharing is the Uber platform, which connects passengers and drivers through a mobile application (Watanabe et al., 2017, Sinclair, 2016). Ridesharing intermediaries have the power to manage orders, establish the rules of user relations, a pricing policy and the conditions of drivers' employment (Malin and Chandler, 2017, Posen, 2015). A few studies also explore peer-to-peer ridesharing, which represents a communal form of ride service consumption, whereby an owner shares a car during his/her trip to a destination with other passengers. (BÁLINT and TRÓCSÁNYI, Shaheen et al., 2016). Users are empowered to build relations with each other, negotiate deal prices and change the distribution channels of their services and goods. The main difference of the latter from mediated ridesharing is the collective use of the ride service by the driver and the other passengers of the car (BÁLINT and TRÓCSÁNYI, Ballús-Armet et al., 2014). The term *carsharing* has also been introduced to describe the practice whereby a supplier provides an automobile to a consumer in exchange for compensation. During carsharing passengers acquire the temporary use of a tangible resource, which is the car, opposed to the ride service it provides (BÁLINT and TRÓCSÁNYI, Ballús-Armet et al., 2014). Despite the conceptual difference between the two transportation alternatives, in many instances, the terms ridesharing and carsharing are used interchangeably (e.g. (Posen, 2015, Pfeffer-Gillett, 2016, Watanabe et al., 2017)).

Collaborative Travelling: The sharing of transportation experiences and accommodation has been widely discussed in tourism research, which has explored the consumers' perspective on the consumption of alternative services in *travel* practices (Forno and Garibaldi, 2015, Karlsson et al., 2017, BÁLINT and TRÓCSÁNYI, Tussyadiah and Pesonen, 2015). Transportation and accommodation sharing is explained by two conditions, namely the material efficiency of the product/service offering and the cognitive model of sharing (Ertz et al., 2016). On the material level, mediated collaboration represents a purely commercial venture. The cost of the exchange of cars made it possible to enjoy travel over short distances, which used to be an expensive service (BÁLINT and TRÓCSÁNYI). Also, apartments sharing made it affordable for tourists to travel to foreign destinations (Tussyadiah and Pesonen, 2015). On the cognitive level, users

follow the idea of the shared treatment of common objects. The cognitive state of mind exists when the technology does not mediate consumption (Ertz et al., 2016). This happens because technological mediation decreases the likelihood of individual subjective factors to foster social relationships among users and shape market-place transactions.

2.3.4. Resources and Implications

***Common Property**:* An emerging model of collaborative consumption of goods has introduced the notion of *common property*. This notion refers to an appropriated resource that is used collectively by commons. The juxtaposition of the words "common" and "property" is oxymoronic to a certain extent. This is so because the concept "common" defends communal interest, equality and collectivism in exchange, whereas the term 'property' stands for materiality and contractual obligations under which property is traded. The utilisation of the term puts a vague line between gifts and commodities, reflecting a non-dogmatic use of these terms throughout the literature (Morgan and Kuch, 2015, Frenken and Schor). Common *properties* and sharable *assets* relate to transportation, accommodation, tourism and the fashion industries (Sinclair, 2016, Esben Rahbek Gjerdrum and Sarah, 2015, Fremstad, 2017, Ballús-Armet et al., 2014, Kathan et al., 2016). Examined within the context of a market-based environment, resources bear economic and utilitarian value for users. The exploration of platforms on which resources are distributed results in their categorisation into five non-mutually exclusive groups, namely underutilised resources, on-demand resources, second-hand products, organisational goods and private resources, discussed as follows (Fremstad, 2017, Gullstrand Edbring et al., 2016, Aloni, 2016, Pantano and Stylos, 2020).

Transport Resources: The system that is utilised to leverage an idle value of resources is defined as an *access to excess* platform (Aloni, 2016). This term specifies an access-based infrastructure through which resources are exchanged. Within transportation systems a common property is a *car*. Depending on the distribution system the transportation resource can be classified as an underutilised, on-demand, organisational and a private one. An underutilised resource refers to a good whose capacity has not been fully exploited by an owner (Munoz and Cohen, 2017). The exposure of underutilised capacity of cars occurs when owners provide their idle assets for temporary possession by other consumers. The sharing of underutilised cars brings economic

value to an owner in the form of compensation for the exchange. A consumer receives the utilitarian value of the resource operation and the financial value of reduced access (Ertz et al., 2016, Aloni, 2016, Birdsall, 2014). The distribution of on-demand resources offers immediacy of supply and the satisfaction of consumers' demand (Aloni, 2016). The most-widely discussed form of on-demand transportation resources are Uber cars. During ride-sharing, the passengers' demand for transport is fulfilled by access to the closest available car. On-demand supply of cars increases the efficiency of logistics, saves resources, reduces the item price and maintenance expenses (Laurell and Sandström, 2016, Malin and Chandler, 2017, Posen, 2015, Redfearn Iii, 2016). Organisational resources are exchanged on a B2C basis and refer to products belonging to companies. Car-sharing providers, such as ZipCar, City Carshare or Car2Go, offer company-owned cars through B2C channels (Posen, 2015, Cohen and Kietzmann, 2014). Conversely, private resources are distributed through direct exchange on peer-to-peer platforms (Aloni, 2016). Private cars are rented out by owners, who are responsible for the listing in the system and accountable for the services that the vehicles produce (Cohen and Kietzmann, 2014).

Accommodation Resources: An *Apartment* represents an underutilised resource distributed among consumers to satisfy demand for housing. Suppliers' provision of apartments is conditioned by the idleness of a resource and the possibility to match consumers' needs, budgets and taste (Wang and Nicolau, 2017). However, the value of private apartments that are shared through platforms such as AirBnb is not exclusively utilitarian and financial, due to the role of C2C relationships that facilitate social interactions (Tussyadiah and Pesonen, 2015, Hwang and Griffiths, 2017, Belarmino et al., 2017). For example, in tourism, a consumers' decision to select an accommodation provider is based on both financial (price) and non-financial factors (the socio-demographic profile of suppliers and providers) (Heo, 2016, Karlsson et al., 2017). The compatibility of suppliers and consumers is an important factor in relationship development (Karlsson et al., 2017). This demonstrates that the stimuli of the resource exchange can define the value of a resource.

Retail Resources: *Goods* and *second-hand products* are exchanged through second-hand markets, product-service systems and on-demand platforms that can bear an underutilised meaning for the supplier and an on-demand value for the consumer. Typical products include fashion items, equipment, furniture and tools (Retamal, 2017, Esben Rahbek Gjerdrum and

Sarah, 2015, Fremstad, 2017, Gullstrand Edbring et al., 2016). An alternative consumption stimulates the intensified use of goods of higher quality, higher monetary value and better durability (Retamal, 2017). Second-hand resources often relate to the sharing economy. Still, it is difficult to assign them to either the gift or commodity categories. This is because although individuals acquire permanent ownership of second-hand products as gifts the acquisition is based on monetary compensation (Belk, 2010, Frenken and Schor).

2.3.5. User engagement

Motives: Current research has found evidence of the influence of three main types of drivers on *purchase intention* and *consumers' behaviour*. The main one is an economic *motive*, followed by a social *motive* of relationship development and a hedonic *motive* of enjoying the practice. To a greater extent, consumers' decision to engage in collaborative consumption is underpinned by users' interest in profit maximisation, the rationalisation of saving and investment (Hawlitschek et al., 2016, Tussyadiah and Pesonen, 2016, Gullstrand Edbring et al., 2016, Tussyadiah, 2015, Scaraboto, 2015, Gleim et al., 2019). Economic benefits are enabled by ICT, whereby technological intermediation reduces the costs of goods and services by optimising the search, contract establishment and product allocation (Watanabe et al., 2017). The consumer's selection of a provider is underpinned by price-sensitivity, which controls the perception of the financial value and risk of participation in sharing practices (Hwang and Griffiths, 2017, Tussyadiah and Pesonen, 2015, Benoit et al., 2017, Milanova and Maas, 2017). Therefore, *pricing* strategies are imperative in regulating market demand and commercial relations between suppliers and consumers (Wang and Nicolau, 2017, Arora et al., 2016, Kumar et al., 2018). The examination of the sharing of private resources found that consumers are engaged in collaborative consumption for the sake of *social interaction* and shared *experience* (Tussyadiah and Pesonen, 2015, Lee and Kim, 2017, Belarmino et al., 2017, Tussyadiah and Pesonen, 2016). However, the significance of hedonic and social motives was not observed consistently throughout the studies reviewed.

Moderating Factors: The variability of findings about the significance of social and hedonic motives can be explained by two factors. Primarily, individual factors, such as user personality and socio-demographic status, may moderate the perception of benefits and barriers. Mediated access to services in the P2P accommodation market represents an economic transaction

encouraging social practice that attracts consumers of different socio-economic status (Lutz and Newlands, 2018). Users of lower status and an older age are motivated by economic stimuli, whereas social and hedonic motives play the dominating role for wealthier and younger consumers (2016). In addition, consumer innovativeness can influence the perception of the economic and hedonic values of collaborative practices (Hwang and Griffiths, 2017, Tussyadiah and Pesonen, 2016). The second factor is the type of platform, the type of collaborative practices and the role of the user (Gullstrand Edbring et al., 2016, Böcker and Meelen, Gupta et al., 2019). For example, the survey of a sample of consumers engaged in the mediated consumption of goods found a distinctive group of barriers to engagement (Gullstrand Edbring et al., 2016). Users highlighted the sanitary conditions of goods, non-ownership, the impracticability of the alternative mode of consumption, the lack of trust and unavailability of resources as impeding factors of engagement (Gullstrand Edbring et al., 2016). In contrast, in accommodation sharing, which represents the practice of unmediated access to services, users prioritised hedonic and social motives (Tussyadiah and Pesonen, 2016, Böcker and Meelen). Moreover, the duration of involvement in collaborative consumption, measured by the time and frequency of peer-to-peer transactions, influence the perception of barriers. Consequently, individuals with a higher level of familiarity with platforms are more likely to express positive predisposition towards collaborative practices (Gullstrand Edbring et al., 2016, Lee and Kim, 2017, Tussyadiah and Pesonen, 2016). However, in the context of rental platforms, an intention to rent is contingent on the duration of rental services (Gullstrand Edbring et al., 2016). Even though the variability of results has not been yet fully explained, so far the evidence suggests that the most influential factors are the socio-demographic factors, the type of platform, resources and consumption practices on consumers' intentions.

2.3.6. Consequences

Environmental Impact: Reduced transaction costs and the overall efficiency of collaborative consumption can provide significant benefits for consumers, fuelling demand in alternative markets. The collaborative model of consumption makes it possible to reuse and recycle durable goods, idle resources, second-hand products and offerings exchanged through on-demand systems (Frenken and Schor, Esben Rahbek Gjerdrum and Sarah, 2015, Retamal, 2017, Fremstad, 2017). The exploitation of these resources lowers the demand for new goods and

services, resulting in less waste and the preservation of resources (Fremstad, 2017, Retamal, 2017, Gössling and Hall, 2019). A longitudinal natural experiment based on the data on waste generation concluded that the expansion of the Craigslist platform in California and Florida (USA) reduced the solid waste in the states by one third (Fremstad, 2017). However, the effect of the sharing economy on resource preservation is more theoretical than actually observed (Bachnik, 2016, Rózycka, 2016). Any long-term impact of collaborative consumption on environmental sustainability has not been empirically shown (Frenken and Schor).

Institutional Impact: The potential of the ever-growing sharing economy is currently difficult to assess (Bonciu and Bâlgar, 2016, Retamal, 2017, Fremstad, 2017, Watanabe et al., 2017). A digital economy represents a double-edged sword. On the one hand, the non-accountability of companies to governments and the digital intermediation of platforms make it possible to keep the cost of services and goods down. This favours consumers and facilitates the expansion of platforms (Munkøe, 2017, Watanabe et al., 2017, Weber, 2014). On the other hand, platform mediation of virtual markets leads to an *institutional change*, which refers to the change of rules governing market relations (Laurell and Sandström, 2016, Watanabe et al., 2017, Morgan and Kuch, 2015, de Leeuw and Gössling, 2016). From the suppliers' and intermediaries' perspectives, an institutional change brings immediate *regulatory complexities* and allegations because of the inability of suppliers to ensure the *safety* and privacy of users. Virtual marketplaces create conditions for companies to bypass obligatory *legislation* related to *tax* and *insurance* (Miller, 2016, Sprague, 2015). Moreover, the introduction of platforms has changed the fabric of the market and could affect the performance of incumbent firms (Acquier and Carbone, 2018). The floating pricing policy imposed by sharing platforms can lead to a collapse in prices on products and services of traditional suppliers, leading to a decrease in the overall profit margin of the market. In the long-term, the network effect may potentially threaten the global market by decreasing profitability and market homogeneity (Cusumano, 2015). Profits from digital transactions can fuel the grey economy, affecting the macro-economic capacity of countries (Watanabe et al., 2017, Dabrowska and Gutkowska, 2015). Given the disputes about the impact on incumbent firms and the global economy overall, long-term positive prospects are far from being certain. Paradoxically, both challenges and benefits are rooted in ICT, which has transformed business practice into a virtual marketplace (Watanabe et al., 2017, Dabrowska and Gutkowska, 2015).

2.3.7. Social Perspective

The literature has broadly discussed the social practices of consumption, which are not contingent on the reciprocal actions of users. These practices represent the exchange of tacit and tangible resources that bear social meaning for users. In this stream of the literature, consumption is driven by the motives of altruism, desire for social interaction and the attainment of authentic experience. The practices disrupt consumption habits, change lifestyle towards sustainability and lead to social wellbeing. Table 3 presents the high-frequency attributes of the sharing economy that reflect the findings and debates in the literature about the social dimensions of the practice of consumption, resources and their implications, user engagement factors and consequences.

Table 3: The frequency of the main concepts in the literature underpinned by the social perspective

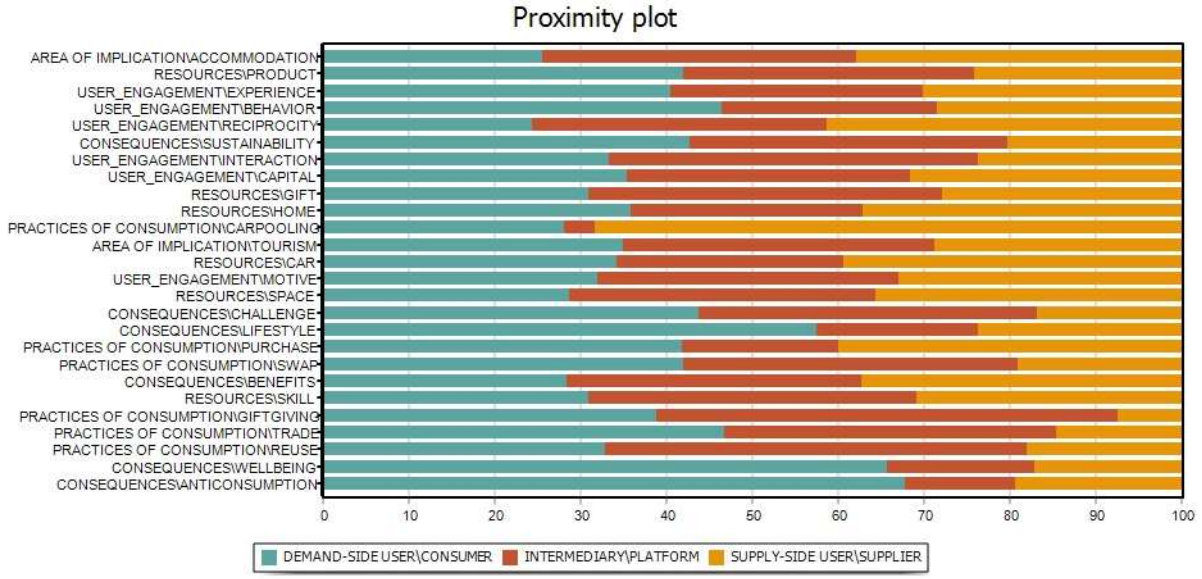
	Frequency	% Processed	Tf • Idf
Stakeholders			
Demand-Side Users			
Consumers	765	0.21%	41.6
Member	665	0.18%	42.6
Customer	124	0.03%	77.9
Guest	100	0.03%	50.3
Tourist	94	0.03%	62.6
Couchsurfers	45	0.01%	45.4
Bookcrossers	27	0.01%	46.1
Carpoolers	23	0.01%	39.3
Supply-Side Users			
Host	230	0.06%	84
Supplier	178	0.05%	29.1
Driver	141	0.04%	38.9
Renter	45	0.01%	36.2

Giver	35	0.01%	35.3
Producer	24	0.01%	17
Intermediaries			
Platform	712	0.19%	91
Couchsurfing	343	0.09%	132.2
Freecycle	279	0.08%	175.3
Freegle	143	0.04%	176
Bookcrossing	83	0.02%	141.7
Uber	66	0.02%	26.8
Oitijjo	61	0.02%	104.2
Practices Of Consumption			
Carpooling	177	0,05%	152,7
Swap	168	0,05%	61,3
Trade	128	0,04%	37,5
Purchase	108	0,03%	29,8
Reuse	93	0,03%	46,8
Giftgiving	82	0,02%	90,7
Resources			
Products	863	1.00%	7.4
Space	344	0.40%	32.6
Home	314	0.36%	55.3
Car	282	0.33%	39.3
Gift	212	0.25%	65.6
Skills	141	0.04%	28.5
Areas Of Implication			
Accommodation	642	0.18%	89.5
Tourism	282	0.08%	177.2
User Engagement			
Experience	451	0.12%	20.2
Behavior	448	0.12%	62.4

Social Capital	415	0.11%	26.6
Motive	322	0.09%	41.1
Reciprocity	277	0.08%	59.9
Interaction	233	0.06%	24.6
Consequences			
Sustainability	904	1.05%	95.4
Lifestyle	254	0.29%	92.7
Challenge	201	0.23%	21.2
Wellbeing	158	0.18%	105.3
Anticonsumption	123	0.14%	81.9
Benefits	85	0,02%	16,1

Figure 8 demonstrates the proximity plot of the *stakeholders* concepts (i.e. supply-side users, demand-side users, intermediaries) with the high-frequency concepts of other retrieved categories listed in Table 3. Each concept matches a three-colour bar, whereby the dominant colour illustrates the tendency of researchers to discuss the concepts with consumers, suppliers or intermediaries/platforms. For example, the dominance of blue is evident in relation to three concepts of the consequences category. Such proximity suggests that *consumers* are deemed to play a pivotal role in social transformations towards *anti-consumption*, sustainable *lifestyle* and social *wellbeing.* The prevalence of yellow means that the suppliers' perspective is adopted when it comes to exploring *reciprocity*, *carpooling* practice and the *accommodation* market. When it comes to the intermediaries' perspective, this stream of literature mostly relates platforms to the non-commercial form of transactions, which is in contrast to the stream of research using the economic perspective. The platforms are discussed to facilitate *gift-giving*, *reusing* and social *interaction* between users.

Figure 8: Proximity plotting of the users and intermediaries categories with practices, resources, consequences and user engagement



2.3.8. Practices of consumption

Defining Gift-Giving Practices: The distinctive type of practice that has emerged in this stream of the literature is gift-giving (Matteo and Daniele, 2014, Aptekar, 2016, Whitham and Clarke, 2016, Martin et al., 2015, Harvey et al., 2014a). At the core of the practice is the concept of *generalised reciprocity*, which makes gift-giving a non-compensated form of resource distribution (Belk, 2010). A purely social depiction of this practice is rooted in the belief that it does not oblige consumers to reciprocate. For example, the *reuse* of personal items through Freegle and Freecycle communities is interpreted as an altruistic and voluntary gift-giving practice, driven by environmentalism and the desire to minimise class inequality (Aptekar, 2016). However, the literature has also introduced a second interpretation of generalised reciprocity, whereby it assumes the return on exchange in future transactions (Aptekar, 2016, Matteo and Daniele, 2014, Whitham and Clarke, 2016). This perspective illustrates free reuse platforms as commercially-oriented markets of resource distribution (Whitham and Clarke, 2016, Martin et al., 2015). The discrepant explanation of gift-giving practices is explained by different motives that actors manifest when engaging in the practice. The study by Matteo and Danielle (Matteo and

Daniele, 2014) illustrated different interpretations of social practices based on generalised reciprocity. The authors proposed that the transfer of resources from one member of the community to another could imply the notions of sharing, gift-giving and commodity exchange non-exclusively. The practices within a platform can be considered as sharing, because they enable members to collectively use resources through access. The consumption within a platform can also be considered as gift-giving, due to indirect reciprocity among the members of the community. Finally, gift-giving can be regarded as a commodity exchange, due to the latent commercial value that free access to resources implies for a receiver (Matteo and Daniele, 2014). This insight suggests that there is a fine line between gift-giving and sharing, as well as the social and economic values of consumption. The level of intimacy between parties varies depending on the role of the actors in the community, who can be either donating or receiving. However, the assumption that gift-giving and sharing facilitate utilitarian values would be misleading, unless the motives of users are known.

***Social Roots of Collaborative Consumption*:** The literature discusses collaborative consumption practices like *swapping, carpooling, trading and purchasing* as a reflection of social exchange (Hong and Vicdan, 2016, Shaheen et al., 2016, Lamberton, 2016, Begum and Anjum, 2016, McArthur, 2015, Decrop et al., 2018). For example, home swapping in Couchsurfing communities represents free exchange or sharing, characterised by a high degree of service personalisation (2015, Decrop et al., 2018). In contrast, carpooling is a casual form of reciprocal sharing of a ride with another passenger, whereby the service is financially compensated for a driver. The social aspect of carpooling practices has led to examining the users' role in consumption practices (Shaheen et al., 2016, Yang et al., 2017, Ellen, 2015, Herbert and Collin-Lachaud, 2016). Specifically, it was found that vehicle drivers engaging in carpooling share common socio-demographic patterns, such as age and employment status (Shaheen et al., 2016). *Trading and purchasing* are conducted on time-banking, marketplace and food exchange sites. Although the practices imply explicit reciprocation, consumers are stimulated by the values of environmentalism, developing peer relationships and building an egalitarian community (Piscicelli et al., 2015, Shaheen and Chan, 2016, Huber, 2017, Yang et al., 2017, Voytenko Palgan et al., 2017, Schor et al., 2016). These practices do not result in a robust demand-supply match, which undermines the traditional notion of the trading economy (Schor et al., 2016). Hence, the idea that the compensated exchange has an economic value would be based on a

superficial assessment of the practices. The concept of the sharing economy is mainly translated through the understanding and vision of consumers, whereas their motives become a proxy for defining the social or economic nature of consumption (Gruszka, 2017, Geiger et al., 2017). The supporters of social framing associate the sharing economy with non-profit initiatives that stand for fair, connected and sustainable communities. The proponents of economic framing support collaborative practices for the sake of creating new employment and market opportunities (Gruszka, 2017).

2.3.9. Resources and implications

Gifts or Debts: The products and services circulating in the sharing economy are often symbolically called *gifts* (Aptekar, 2016, Matteo and Daniele, 2014, Geiger et al., 2017, Harvey et al., 2020). The conditions upon which gifts are exchanged in the sharing economy are debatable. On the one hand, a gift has no cost for a receiver, although it causes emotional dependence and subordination to a giver (Geiger et al., 2017). The feeling of gratitude for the gesture of good will is akin to the feeling of indebtedness. It puts a receiver into an inferior position, making it possible for the donor to control and manipulate the beneficiary of the gift (Aptekar, 2016, Waite and Lewis, 2017). This makes the resource a covert lever in peer-to-peer relations. For example, guests can engage in domestic labour that they carry out for the exchange of goods and shelter. The relations are based on moral commitment to acknowledge hosts' kindness (Waite and Lewis, 2017). Some rituals resemble a charity act, though, which requires unwilling gift-giving for the sake of social approval and reputation (Matteo and Daniele, 2014).

Intangible Resources: *Skills* can be an intangible form of gift or sharable knowledge. The sharing or exchange of skills is driven by partners' non-reciprocal commitment to spreading the knowledge among like-minded people (2016, 2016a, Harvey et al., 2020). However, the role of motives, such as altruism, social approval, reciprocation of a reward amongst others, has not yet been studied in depth. Although skills facilitate the development of relations in social exchange, this raises the question as to which type of practice (sharing or gift-giving) is being referred to. Due to the intangibility of skills, it is difficult to assess whether the ownership is temporary or permanent. It is also unclear whether the resource is used by the giver and receiver simultaneously or transferred for individual use by a receiver. Another intangible resource is

space, which serves as a shared working venue for collaborative communities. Space creates a high degree of intimacy and solidarity among actors (2016, Bouncken and Reuschl, 2016, 2016a). The resource is social by nature, triggering interaction development and producing social relations as a granted outcome.

Tangible Resources: *Products* that represent tangible resources have been considered mostly in the context of free transactions in online communities (Geiger et al., 2017, McArthur, 2015, Hong and Vicdan, 2016, Huber, 2017, Voytenko Palgan et al., 2017). Free sharing encourages the increase of users' demand for used products and reduces the consumption volume of new ones (Binninger et al., 2015, Barnes and Mattsson, 2016a). Sharing of *homes* and *cars* helps users to fulfil their social needs (Hong and Vicdan, 2016). Unlike AirBnb apartments, the exchange of homes is performed under the condition of resource availability rather than monetary compensation. While the economic value of the resource is arguably a motivational factor, the practices are framed as social movements (Forno and Garibaldi, 2015, van Nuenen, 2016, Voytenko Palgan et al., 2017). The home represents the venue reconciling hosts and guests, putting guests into the local cultural context, thus turning a stranger into an insider in the community (van Nuenen, 2016). The development of relations between a home supplier and a guest facilitates social inclusion (Cockayne, 2016). The hedonic value of a resource is reflected by the authenticity of the home sharing experience (Richardson, 2015, van Nuenen, 2016, Dickinson et al., 2017, Wyatt, 2014, Schor et al., 2016). At the same time, research determines utilitarian value, whereby the accommodation and transportation resources represent an alternative and cost-effective way to accomplish mobility and housing needs (Shaheen et al., 2016, Gruszka, 2017). The identification of the values of material resources is more complicated. Cars, homes and other products have explicit utilitarian value, while social property is implicit and inconsistent. The exploitation of their social value is dependent on the degree of reciprocation that collaborative practice implies. The lack of obligation and the expectation of reciprocity suggest that the practice is based on social principles.

2.3.10. User Engagement

Social Capital: User engagement has been examined primarily through the social capital perspective (Barnes and Mattsson, 2016a, Kim et al., 2017, Ferrari, 2017, Dickinson et al., 2017,

Schor et al., 2016, Starr Jr et al., 2020). Social capital is a pervasive concept that embraces resources produced through the networks of human relations (Ferrari, 2017, Kim et al., 2017). Social capital is expressed through four dimensions, which are motivational (e.g. the enjoyment of sharing), structural (e.g. the number of social ties in the network), cognitive (e.g. shared experience) and relational (e.g. reciprocity) (Nahapiet and Ghoshal, 1998, Kim et al., 2017). These dimensions construct the analytical framework for examining the factors in sharing intention and the user engagement process (Kim et al., 2017). So far, the research has found a direct influence of three types of factors: motivational, cognitive and relational (Kim et al., 2017, Harvey et al., 2014a, Whitham and Clarke, 2016, Geiger et al., 2017). These forms of social capital reflect user values, shared experience about the participation in the network and the conditions under which the interaction between users occur. The role of the aforementioned forms of social capital is moderated or mediated by trust (Kim et al., 2017, Lu et al., 2020). The structural aspect refers to the external dimension, which reflects the number and the centrality of the user's connections within the network (Ferrari, 2017, Kim et al., 2017). This has not been examined thoroughly in the literature, but it could point to user expectations of the network against current positioning within it.

Motivational and Cognitive Dimensions: To a greater extent, consumers' decision to join a community is conditioned by intrinsic motivation, reflecting the enjoyment from sharing. This motive has been examined in relation to the practices of home-swapping, land-sharing and space-sharing (Voytenko Palgan et al., 2017, Lampinen et al., 2015, Huber, 2017, McArthur, 2015, Forno and Garibaldi, 2015). The enjoyment of collaboration may bring greater satisfaction than the material outcome of the practice (McArthur, 2015, Sthapit and Jiménez-Barreto, 2018). The manifestation of enjoyment is contingent on cognitive constructs, such as shared knowledge and *experience*, and personal traits, such as materialism. On the one hand, intention to share and behaviour are dependent on expectations and the perception of values derived from prior experience and interaction. The more experience and time as part of the community users have, the less likely they have the intention to stay as members of this community. This finding suggests that the time spent in the community moderates intention (Kim et al., 2017). On the other hand, people with a strong materialism trait are less likely to share. This is because materialism represents the ideology stressing the importance of possessiveness, which conflicts with the non-ownership philosophy of sharing (Akbar et al., 2016, Davidson et al., 2018).

Moreover, consumers' engagement in social practice cannot be entirely credited to intrinsic factors. Sustainability is a second motive driving user decisions and behaviour. The sustainability value reflects the user mind-set pursuing the reduction of new resource consumption or the replacement of new products with used ones (McArthur, 2015, Kim et al., 2015, Hong and Vicdan, 2016, Aptekar, 2016). The sustainability factor is significant in the reuse and recycle practices carried out on the Freecycle platform (Aptekar, 2016).

Relational Dimension: The motive of seeking social *interaction* is manifested when users intend to support the sense of community, develop social ties and achieve reciprocal relations (Starr Jr et al., 2020). The relationships among users are built through repeated collaboration with members they trust (Lampinen et al., 2015). Social and relational factors (Nguyen et al., 2020, Wang et al., 2019), and the individual's predisposition towards sharing (Gupta et al., 2019, Davidson et al., 2018) facilitate the individual's willingness to exchange resources through platforms. The *generalised reciprocity* concept is central to understanding the behavioural patterns of users and regulating relations between members of the community (Lampinen et al., 2015, Geiger et al., 2017, Ferrari, 2017, Piscicelli et al., 2015, Huber, 2017, Whitham and Clarke, 2016, Barnes and Mattsson, 2016a, Kim et al., 2017, Lai et al., 2020). In the context of social exchange, generalised reciprocity has a disputable impact on suppliers' decisions to share (Bridges and Vásquez, 2018, Cherry and Pidgeon, 2018, Hellwig et al., 2015). There are two streams of thought that reflect the understanding of the degree of obligation that generalised reciprocity entails (Geiger et al., 2017, Belk, 2010, Matteo and Daniele, 2014, Kim et al., 2017). The first perspective regards it as a non-binding form of transaction, which implies a greater contribution from providers than consumers. The practices resemble true sharing, which represent a burden for the supplier, unless it occurs between close people (like mother and son). Therefore, suppliers have less interest in the social exchange compared to the economic one (Geiger et al., 2017, Belk, 2010). The other perspective stems from the idea that non-binding and non-compensated forms of consumption rarely hold true (2017, Matteo and Daniele, 2014, Harvey et al., 2020, Harvey et al., 2019). Generalised reciprocity often entails unintentional compensation based on an emotional obligation. Compensation can come from the receiver or other members of a community (Matteo and Daniele, 2014). Thus, the obligation to reciprocate is among the key drivers of social exchange, which maintains the viability of the sharing mode of consumption (2017, Matteo and Daniele,

2014). The misconception of generalised reciprocity makes it difficult to evaluate the degree to which non-compensated practice has a utilitarian or social value.

2.3.11. Consequences

Social Wellbeing: The societal benefit of sharing is community *wellbeing*. This is achieved through the development of social ties and social inclusion (Barnes and Mattsson, 2016a, Kim et al., 2017, Benjaafar et al., 2019). These consequences refer to the relational group of *benefits*. Relational benefits lead to the reinforcement of trust, solidarity and users' self-confidence resulting from social interactions, altruism, as well as commitment in relation to other members of a community (Yang et al., 2017, Ferrari, 2017, Begum and Anjum, 2016, Lai et al., 2020). Still, a few scholars were concerned that social capital may influence the exclusion of a person from the community (Ferrari, 2017, Schor et al., 2016). This could potentially happen when the network imposes restrictions on the quantity or the profile of members. The reputation history of a user may also affect the likelihood of future transactions (Schor et al., 2016). Despite the speculations, the exclusive effect of engaging in a sharing economy has not been empirically examined. Relational benefits remain the subject of debate.

The Path Towards Sustainability: The sharing economy can have a transformative effect on consumer choices, cultural and economic practices (Herbert and Collin-Lachaud, 2016, Laamanen et al., 2015). The phenomenon has a structural impact that disrupts the foundations of consumption, including beliefs, values and norms towards the reduction of consumption (*anti-consumption*) (Laamanen et al., 2015). The socio-technical approach distinguishes the positive role of digital intermediation and social interaction in facilitating anti-consumption movements. Digital attributes enhance resource utilisation, whereas social interactions during the process of collaborative consumption facilitate the balance of resource distribution among members (Martin et al., 2015). The change of consumer behaviour towards a sustainable *lifestyle* will contribute to environmental *sustainability*, which is deemed to be a tool stabilising inequalities in diverse market economies (Hobson and Lynch, 2016, Hong et al., 2016, Martin et al., 2015). Despite the growing number of academic studies and governmental interventions to alter the culture and consumer behaviour, the sharing economy's contribution to sustainability promotion remains at a conceptual stage.

2.3.12. Technological Perspective

Table 4 presents the frequency of the main concepts related to the technological aspects enabling collaborative consumption. The main focus is on ridesharing practices and the exchange of space, apartments, products, homes and property. The research studies consumption practices as a function of platforms that manage the behaviour and interaction of users. Scholars also consider technology when it comes to exploring the impacts on mobility, sustainability, flexibility and labour management challenges that the sharing economy entails.

Table 4: The frequency of the main concepts in the literature underpinned by the technological perspective

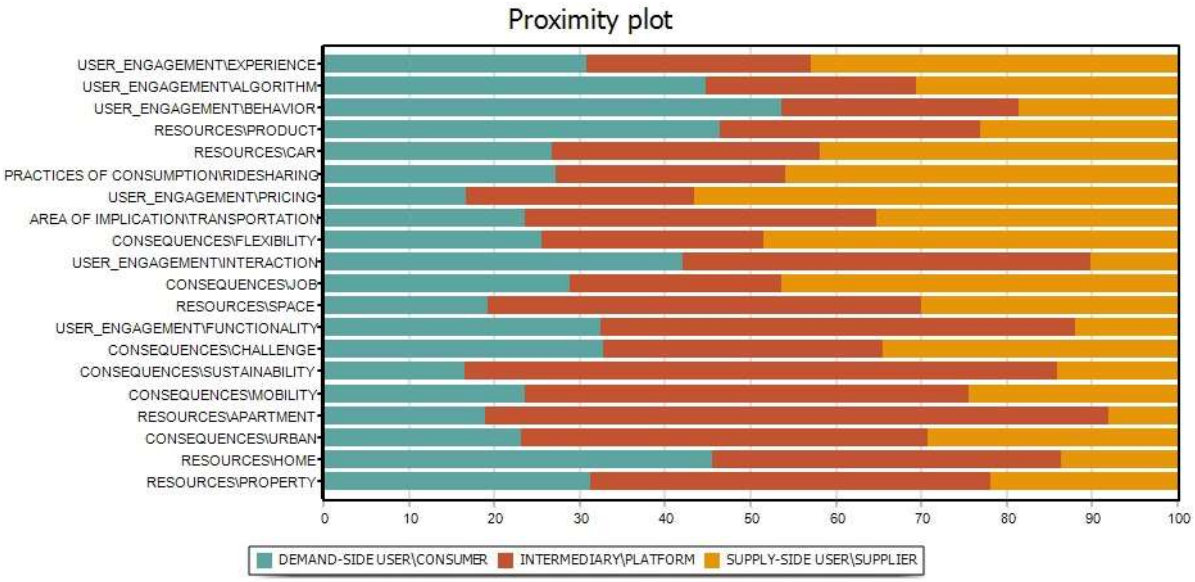
	Frequency	% Processed	Tf • Idf
Users And Intermediaries			
Demand-side user			
Consumer	273	0.52%	23.8
Worker	68	0.13%	29.9
Passenger	47	0.09%	20.6
Customer	10	0.02%	4.4
Supply-side users			
Driver	364	0.70%	71.5
Contractor	23	0.04%	13
Employer	14	0.03%	10.4
Rider	14	0.03%	6.2
Provider	12	0.02%	6.8
Supplier	8	0.02%	4.5
Intermediary			
Uber	283	0.54%	55.6
Platform	217	0.42%	42.6
System	189	0.36%	0

Agent	37	0.07%	12.7
Airbnb	12	0.02%	3.2
Consumption Practice			
Ridesharing	51	0.10%	22.4
Resources And Implications			
Car	118	0.23%	23.2
Product	86	0.16%	3.6
Space	63	0.12%	8.7
Apartment	62	0.12%	45.9
Home	20	0.04%	1.7
Property	10	0.02%	4.4
Area Of Implication			
Transportation	120	0.23%	31.6
User Engagement			
Algorithm	98	0.19%	25.8
Experience	70	0.13%	2.9
Behaviour	43	0.08%	1.8
Interaction	43	0.08%	5.9
Pricing	41	0.08%	23.1
Functionality	25	0.05%	18.5
Consequences			
Mobility	99	0.19%	43,5
Urban	49	0.09%	12,9
Sustainability	39	0.07%	17,1
Challenge	28	0.05%	3,9
Job	25	0.05%	11
Flexibility	21	0.04%	9,2

Figure 9 demonstrates that the literature adopted predominantly *intermediaries'* perspectives in exploring practices in the *transportation* sector, *user engagement* factors (such as *interaction* and

platform *functionality*) and the *consequences* for *urban infrastructure*, *mobility* and *sustainability*. The *consumers' perspective* prevails in discussions about the role of platform *algorithms* in regulating consumer *behaviour*, especially when it comes to the exchange of *products* and *homes*. The *suppliers'* perspective dominates the discussions about the role of technology in managing product *pricing* and *experience* with platform vendors. The proximity plot also shows the focus on suppliers in examining service *flexibility* and labour management.

Figure 9: Proximity plotting of the users and intermediaries categories with practices, resources, consequences and user engagement



2.3.13. Practices of consumption

Technological Framing of Collaborative Consumption: The sharing economy is framed as the outcome of technology advancement (Rosenblat and Stark, 2016, Gargiulo et al., 2015, Yeon-sun and Chang-Hee, 2016, Ambrosino et al., 2016, de Rivera et al., 2017). It is described as a distributed intelligence network that matches supply and demand. This phenomenon could potentially grow into a global economic system functioning without the intermediation of money. The technological framing diminishes the social and economic foundations of collaborative

consumption, highlighting the shortcomings of the social and monetary aspects of exchange. The limitations of monetary exchanges is that money does not represent a holistic measure to assess the value of sharing. Money is a one-dimensional construct unable to reflect different aspects of the value of a product/service, such as reliability, aesthetics and sustainability. The importance of a social factor in managing relations on platforms is also not emphasised. Social capital, such as trust, is ineffective in regulating relations in large-scale networks (Gargiulo et al., 2015).

Ridesharing: Due to the lack of emphasis on the social and economic dimensions of the sharing economy, scholars do not differentiate practices into sharing, gift-giving or commodity exchange. Consequently, ridesharing is defined as a real-time matching of supply and demand, regulated by intelligent systems of algorithms (Rosenblat and Stark, 2016, Gargiulo et al., 2015). Technically, ridesharing represents a decentralised system of applications, enabled by artificial intelligence (AI) and embedded into the devices of users (Heylighen, 2017). The system has been materialised by Uber. The role of drivers in this supply-chain system is debatable and dependent on the state laws where the platform has been implemented. Drivers may be referred to as independent contractors, but they are still constrained by employer rules. Earning money is the main reason that motivates Uber employees, who are often deprived of high-profile employment opportunities (Rosenblat and Stark, 2016). The social aspect of relations between a driver and a passenger is downplayed due to the algorithm that matches inquiries against time and space, and proposes the route to optimise drivers' and passengers' journeys (Gargiulo et al., 2015). Uber demonstrates that purely technological regulation of platforms is not viable. Even if digital intermediation minimises the role of money in the relations between the driver and passenger, the drivers' decision to perform their duties is triggered by monetary reward.

2.3.14. Resources and Implications

System Classification: The characteristics of exchanged *products* and *property* differ depending on the type of technology system (Heylighen, 2017, de Rivera et al., 2017). Technology systems can be classified based on 4 parameters that define the value and characteristics of the resources. These parameters are *usability and functionality*, *trust and reputation*, the *community footprint* and *rules of conduct* (de Rivera et al., 2017). U*sability and functionality* refers to the functions that are responsible for building user profiles, creating user identities, ensuring interconnectivity,

integrating add-on services and interactive design. *Trust and reputation systems* enable vendor ranking and ensure the transparency of usage patterns. The availability of rules of conduct is aimed at controlling users' behaviour on a platform. The community footprint refers to the geographical coverage, and the capability of a system to carry out social and environmental missions. The particular combination of the four dimensions classifies the platform into three types: 1) network-oriented platforms, which embrace the combination of the *trust and reputation* and *the functionality and usability* features; 2) community-oriented platforms, which include all dimensions with the highest performativity of the *community footprint* and the *rules of conduct* features*;* 3) transaction-oriented platforms, which lack any of the dimensions, and are characterised by simple functions (de Rivera et al., 2017).

Resource Classification: Depending on the platform classification, *cars* represent resources that meet community and utilitarian needs. The sharing of cars is arranged through the system of connected mobile applications, whose aim is to provide passengers with dynamic car-riding services (Gargiulo et al., 2015). The system ensures the quality of service managed through instant feedback features and algorithms. The ability to provide ubiquitous and mobile interconnectedness and improve the mobility of community members gives the resource a communal orientation. Cars also represent the resource exchanged in transaction-oriented systems (Ambrosino et al., 2016, FURMAN, 2016). Such a system does not integrate sophisticated features of trust regulation, thus endowing the resource a merely utilitarian value. Similarly, *apartments* and *homes* are examined within the context of a transaction-oriented system that demonstrates their economic value (Yeon-sun and Chang-Hee, 2016). Consequently, the value of the same resource can differ depending on the explicit characteristics of the system within which it is shared.

2.3.15. User engagement

Economico-Technological Features: The major factor driving consumer choices and *behaviour* is the *functionality* of platforms. The level of functionality refers to the degree of the embeddedness of features enabling user connectivity around platform offerings (Kim and Yoon, 2016, Heylighen, 2017, Lombardi and Schwabe, 2017, Akhmedova et al., 2020). Similar to the economic perspective, studies highlight *price* as a major contributor to consumers' decision

making (Kim and Yoon, 2016, Heylighen, 2017, Rosenblat and Stark, 2016, Lombardi and Schwabe, 2017). However, unlike the economic perspective, the literature minimises the human role in rationalising price-led choices and product preferences. *System algorithms* between providers and consumers do the matching, assessment and selection of providers' offerings instead of consumers (Heylighen, 2017). The price-based selection of a vendor is managed by a price-matching algorithm embedded into the recommendation systems of the platforms. Algorithms help generate the coherent output of potential matches that meet consumers' price criteria (Heylighen, 2017, Lombardi and Schwabe, 2017). In practice, peer-to-peer accommodation platforms offer the best matches, by estimating users' interests and needs through the history of their behaviour on platforms (Kim and Yoon, 2016).

Socio-Technological Features: The functionality of community-oriented platforms fosters the social aspects of exchange. Reputation is one of the pillars of sharing platforms that maintains *interactions* between users. It enables the development of social capital, such as trust and virtual reputation (Gretzel et al., 2015, de Rivera et al., 2017, Heylighen, 2017). In collaborative communities social capital is accumulated through personal relations between peers (Ferrari, 2017). In technically sophisticated sharing networks a prior *experience* with the vendors is not required to build trustworthiness. A system generates the profile of suppliers by scoring their reliability based on rankings and the *experience* of previous consumers (Heylighen, 2017). Algorithms also track and evaluate suppliers' actions against ethical and safety principles (de Rivera et al., 2017). These features increase the transparency of relations, help monitor the quality of the service and drive consumers' engagement (Heylighen, 2017, de Rivera et al., 2017). Technological intermediation helps build artificial trust and reputation, which may drive initial consumption. Consumer loyalty is still dependent on the outcome of peer-to-peer relations.

2.3.16. Consequences

Benefits: Sharing platform systems and algorithms are capable of enhancing interactions between users and platforms, contributing to the development and environment of industries (Gargiulo et al., 2015, Ambrosino et al., 2016). The benefits of transport sharing platforms are service *flexibility* and service *mobility*, which in the long-run improve *urban* infrastructure and lead to *sustainability* (FURMAN, 2016, Gargiulo et al., 2015). For example, transport platforms are

centred on the passengers' *flexibility* in optimising and customising services. This relates to the benefits of real-time interaction with suppliers, time and route optimisation, and the flexibility of payment methods. In particular, the application of the sharing economy model in an *urban environment* can make it possible to increase the efficiency of public transport services, change daily customer journeys and overall urban mobility (Gargiulo et al., 2015). In the wider scope, the public shared transportation could tackle sustainability and environmental issues through the reduction of commercial and private car traffic, and the promotion of electric transport (Ambrosino et al., 2016). Similarly, apartment sharing would make it possible to optimise user interaction and energy consumption (Yeon-sun and Chang-Hee, 2016, Lombardi and Schwabe, 2017).

Challenges: The *flexibility* that platforms offer to providers can have positive and negative implications. On-demand employment gives drivers independence and the flexibility of work-patterns (Rosenblat and Stark, 2016). This may be convenient for those drivers seeking supplementary work, though it bears a regulatory *challenge* related to *labour* management (Rosenblat and Stark, 2016, Horney, 2016, Murillo et al., 2017). The implication of the sharing economy in the labour market is defined by Rosenblat and Stark (Rosenblat and Stark, 2016) as algorithmic labour asymmetry. The positioning of alternative taxi companies as neutral technological intermediaries, providing flexible working opportunities for their drivers, contradicts the way drivers are actually treated (Etter et al., 2019). The shortcomings of algorithmic management are manifested in the neglect of drivers' rights in terms of wage rates. The platform sets a low salary rate for routine work and high incentives for work under stricter conditions. The salary policy forces drivers to adopt inflexible terms for the sake of making a better living (Rosenblat and Stark, 2016, Ahsan, 2018, Etter et al., 2019).

2.4. Future Research Agenda

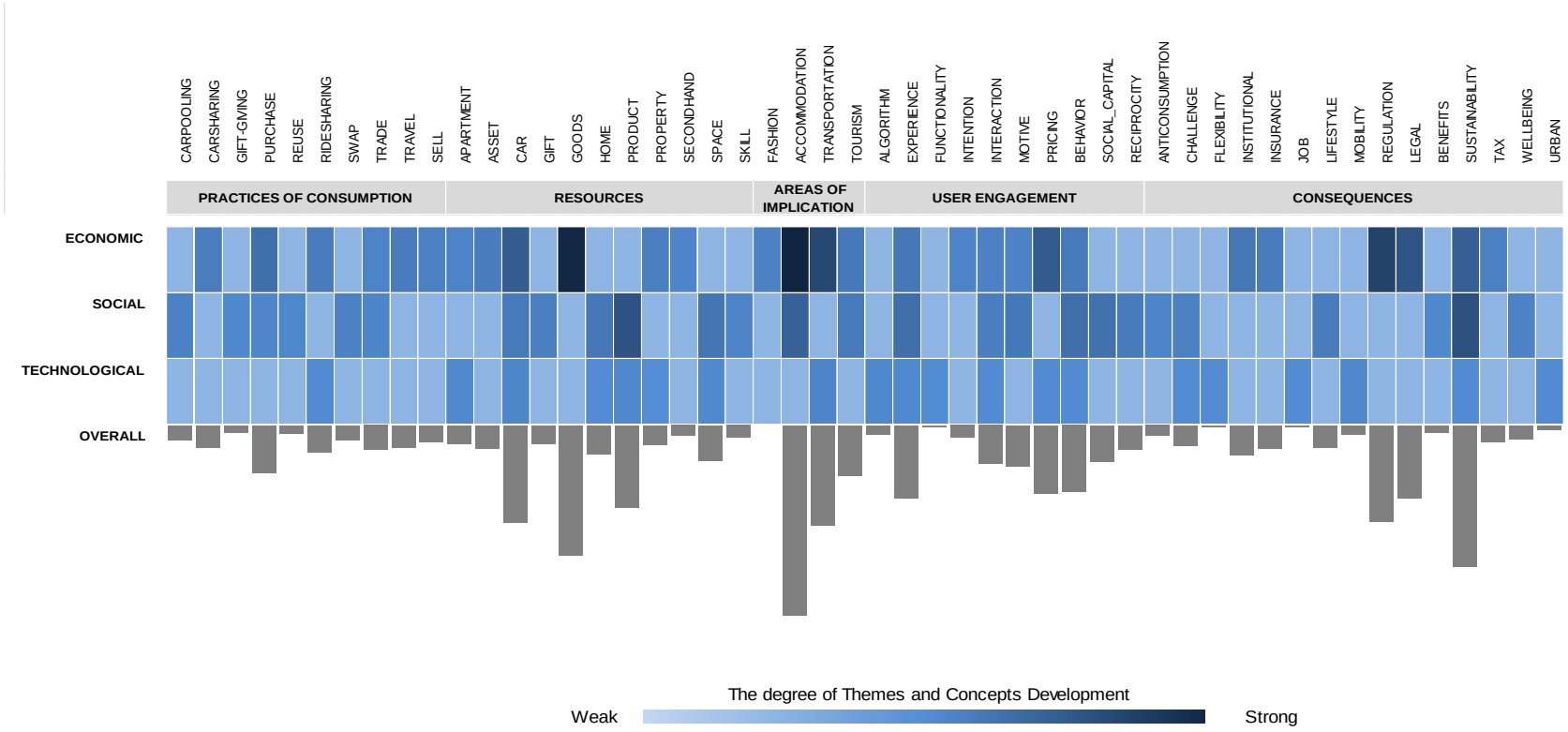
The review has enabled us to examine the context, resources, technical specifications of platforms, user motives, the expected and actual outcomes of collaborative consumption. These were covered from the economic, social and technological perspectives. The synthesis of the streams of the literature also made possible it to build a holistic picture of the phenomenon by capturing divergent aspects found in different streams.

Figure 10 summarises the themes and concepts developed in the economic, social and technological streams of the literature. Cells in the diagram represent the concepts related to the practices of consumption, resources, the areas of implication, user engagement and consequences. The three rows of cells are associated with separate perspectives, i.e. social, economic and technological ones. The colour of the cells ranges between light blue and dark navy. The intensity of the colour indicates the higher frequency of the concept being mentioned in each stream. Grey bar charts demonstrate the frequency of concepts in all three literature streams combined. The figure shows that well-researched topics are mainly underpinned by the economic perspective. Research areas cover the distribution of cars, goods and property in fashion, accommodation, tourism and transportation sectors, and legal and regulatory implications of the sharing economy. The figure also shows the areas of research in each literature stream that have attracted less attention so far. Among these are the distribution of intangible resources, gifts, second-hand products, reusing, the social practice of gift-giving and the practices, except ridesharing, which have been examined in the literature adopting the technological perspective. The unequal development of research areas confines the "depth" and scope of general research. Consequently, it contributes to ambiguous findings on the acceptance and impact of the sharing economy. The degree of the development of concepts in the literature streams (figure 9) and the analysis of the underpinning stakeholders' perspective (Figures 6, 7 and 8) highlight weakness inherent in the current conceptualisation. Among the major challenges is that the role of technical attributes of platforms in examining values has slipped away from the focus of the literature that adopts the economic and social approach (de Rivera et al., 2017). Research could have examined the relationship between technical properties of sharing systems and user motives, underlining the intention towards collaborative consumption. The attention paid to technology is important because algorithms and the functionality of platforms create conditions under which the value of collaborative practices may become exhibited or left dormant. Consequently, technology promotes the economic, social or environmental missions (Ertz et al., 2016, de Rivera et al., 2017). The second main challenge refers to the lack of focus on supply-side users, which might have brought a constrained understanding about the general values of all users and the contrasting motives of engagement in collaborative practices (Matteo and Daniele, 2014). Published research on the consequences of the sharing economy has also raised a number of questions. The literature has intensively discussed the implications of the sharing economy at the state, market and

macroeconomic levels. A few debates have demonstrated that there is still scepticism about the available forecasts and these require further examination. Moreover, the impact of the sharing economy is a complex construct, measured by the time, the nature of the effect, as well as the scale of the effect and the stakeholders involved. There is a need for complementary micro-level research on the operational and social effect on individuals, which has been of a secondary importance until now.

Given that the sharing economy is a technology-enabled socio-economic ecosystem, there is a growing need for a multidimensional and context-dependent approach. The profound examination of the phenomenon is contingent on measurable attributes of collaborative consumption that represent compensation, subjective attributes that refer to values, and technical factors. The focus on characteristics of platforms is imperative, since the sharing economy is built on and put in motion by technology. An in-depth analysis of all stakeholders engaged in sharing enables to understand the human factors that drive free and compensated collaborative consumption. The adherence to a particular perspective is likely to provide a fragmented picture of a complex phenomenon. Thus, it is imperative to develop under-researched topics and revisit areas that have produced conflicting results about the conceptualisation of the sharing economy, the value of practices, the drivers of engagement and consequences.

Figure 10: The development of themes and concepts in the economic, social and technological streams of the literature



2.4.1. Future Research Avenues

This section presents gaps in the current literature and provides recommendations for research beyond the implication in this thesis. The gaps that this thesis aims to address are listed in Table 5. The table offers recommendations for each gap, which are implemented in two surveys discussed further in the thesis.

The Value of Collaborative Consumption*:* The concept of reciprocation is not always effective when it comes to defining the value of collaborative consumption and dichotomisation into social or economic categories. The examination of the value of consumption practices requires a close look at the relationship of three compounds: platform characteristics, the user role and the practice of resource distribution.

1) It is important to examine the degree to which users perceive the distribution of resources and the procedures on sharing economy platforms to be reciprocal. This can be done by examining the subjective evaluation of relationships outcome. To understand the reason as to why reciprocation does not always hold true, it is important to explore the factors that users take into account when evaluating reciprocity.
2) The research so far has been more inclined towards the demand-side user. To avoid the unbalanced research, it is needed to adopt a comparative research to examine the difference in value perception of collaborative consumption by demand-side and supply-side users. Alternatively, to make the findings more generalisable for both user segments, the research can focus on a sample with the proportional representation of both user groups.
3) The technological perspective suggests that the architecture of the platform defines values and resource implications (de Rivera et al., 2017). Given that, there is a need to diversify the range of platforms, based on the industry, their usability and functionality, embedded trust and reputation systems, the community footprint and rules of conduct. New studies could offer an insight into different premises of collaboration and test relations between system characteristics and values.
4) Current research has mainly investigated the distribution of tangible resources and compensated practices of consumption. To improve the external validity of findings, it is important to contrast the findings of existing studies. This can be done by recruiting

people exchanging diverse resources and services. To have a more precise understanding of the values driving the collaborative consumption, the research can control for the type of consumption practice (e.g. gift-giving, temporary sharing and second-hand resource reusing).

The Acceptance of the Sharing Economy: Current research is limited to several types of motives, such as price, hedonic factors, social network development, altruism and environmental sustainability that were found to have a direct influence on intention. To gain a richer understanding of user motives the following steps should be taken:

1) To a major degree, the acceptance of the sharing economy is a user-centric type of research. It should be based on a clear understanding that the variability of drivers is dependent on user perception of the value of collaborative consumption. It requires a consideration of user background. This recommendation stems from the finding made by Gruszka (Gruszka, 2017), who concluded that user attitudes towards the sharing economy may vary based on personality traits. Hellwig (Hellwig et al., 2015) examined user personality traits for developing the sharing practices taxonomy.
2) A cross-cultural perspective would complement the observations made by Tussyadiah and Pesonen (Tussyadiah, 2016), which suggest that older and wealthier users are driven by pro-social values of engaging in the sharing economy. It can be assumed that this finding may not be consistent in cultures where norms are rooted in more conservative ideologies. Hence, it is needed to validate the moderating role of socio-economic factors in different contexts.
3) The level of technological moderation of platform transactions is an important variable to control in research, because it has an influence on the intimacy of user relations (Ertz et al., 2016). There is also a dearth of research examining the moderating effect of the trust and reputation systems on risk perception. This gap calls for an investigation into the indirect influence of technology characteristics on intention to engage in collaborative consumption.
4) An examination of more antecedents of intention and moderators is required. The findings of the study by Kim *et al*. (Kim et al., 2017) suggest that there is a potential direct relation of trust on behavioural intention. While a few studies looked into the correlation of trust

and reputation on behaviour, other social factor left unexplored, although they may play a dominant role for some relations. This assumption is based on the finding that social benefit is more important in the exchange of private resources that imply a higher level of intimacy between the supplier and consumer (Tussyadiah, 2016).

The Impact of the Sharing Economy: Research needs to examine the social impact on an individual level, as well as empirically support the long-term impact that has been the subject of debates.

1) Studies so far have debated the role of social capital in developing social inclusion (Barnes and Mattsson, 2016a, Kim et al., 2017, Ferrari, 2017). The bonding role of social capital has not been empirically investigated. To address this gap, there is a need to draw on social exchange theory perspectives to quantitatively examine the interaction effect of social capital and social exclusion.
2) Against the common rhetoric about the macro-level impacts of the sharing economy on markets, environment and institutional structures, the literature does not provide empirical evidence about the user-perceived impact on the quality of their life. Therefore, the research needs to be conducted on the investigation of the relationship between the participation in the sharing economy and subjective well-being.
3) There is a strong need to examine environmental sustainability from a social perspective. Specifically, research needs to investigate the drivers of a sustainable lifestyle and the long-term effect of anti-consumption behaviour on sustainability. The literature may benefit from adopting a longitudinal study to assess the actual impact of reuse and recycle platforms on resource preservation and the reduction of the production of new goods.
4) Significant attention has been paid to the governance of platforms and the potential impact of the introduction of regulatory regimes. This points to the need for future research to examine the viability of various governance programmes and regulatory responses.
5) The analysis of the impact on institutional change is a very challenging proposition. It requires a multi-level examination of interactions among private actors, private organisations and public institutions.

Table 5: Gaps and Recommendations addressed in this thesis

Survey	Gap	Research Questions	Recommendations
Survey 1: Social and Psychological Antecedents and the Outcomes of Social Exchange	Antecedents of the participation in the sharing economy from the user perspective	RQ2: What are the factors of social exchange which may facilitate or inhibit the participation in the sharing economy?	1: Adopt social exchange theory perspective to explore psychological and social factors inhibiting or facilitating relations between members of the sharing economy. 2: Examine the role of cognitive, structural and relational social capital factors in motivating the collaborations within the sharing economy.
	The impact of the sharing economy at an individual level	RQ3: Does the participation in the sharing economy affect users' perception of the quality of life?	1: To examine the users' perception of the outcomes of the participation in the sharing economy in terms of social inclusion and wellbeing. 2: To examine the moderation effect of socio-demographic factors and use patterns on the relationships between use behaviour and outcomes.
Survey 2: Reciprocity and Commitment in the Sharing Economy	Users' perception of the reciprocity in collaborative relations	RQ4: What factors affect the evaluation of reciprocity in the context of the social dilemma (i.e. individual rationality vs collective benefit maximisation)? RQ5: How does perceived reciprocity differ depending on personality factors?	1: Adopt an equity theory framework to explore the factors affecting the evaluation of reciprocity in the sharing economy. 2: To investigate how perceived reciprocity differs depending on personality. Extend the framework by adding the factor indicating the social identity and individuals' personality, such as equity sensitivity and predisposition towards maximisation, which can influence the perception of reciprocity by users.
	Users' responses to reciprocal/ nonreciprocal relations	RQ6: What types of behaviours follow individuals' comparison of the outcomes against the	1: To investigate how users respond to perceived reciprocity/lack of reciprocity in exchange relations performed through sharing economy platforms. Examine the effect on

		contributions made to exchange relations? RQ7: How do personal and situational factors affect the strength of perceived reciprocity and subsequent cognitive and behavioural outcomes?	relationship commitment and the role of emotion-focused and problem-focused coping in feeling committed to sharing economy platforms. 2: To explore the effect of the value of exchange, social influence, response efficacy and self-efficacy on the strength of perceived reciprocity, coping mechanisms and commitment.

3. Conceptual Models and Hypothesis Development

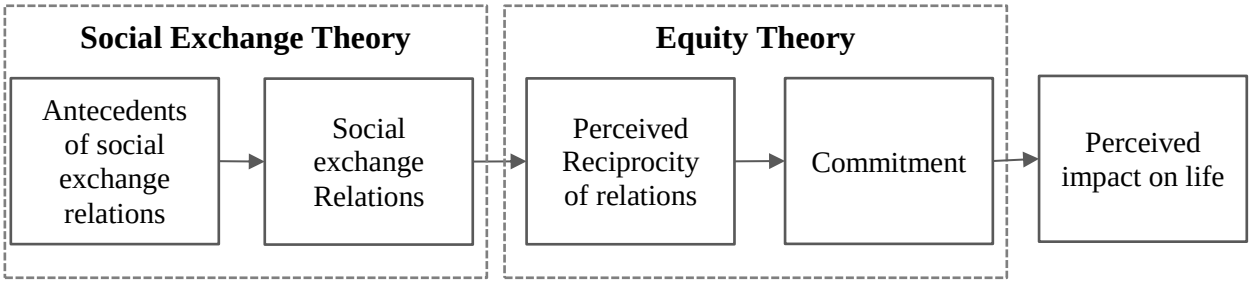
The overarching conceptual model of consumer behaviour in the sharing economy is represented as a four-stage process (Figure 11). The first stage in the model illustrates how the actual use of sharing economy platforms is facilitated by certain beliefs, norms and situational determinants, which is represented by the link between antecedents and social exchange relations (e.g.(Möhlmann, 2015, Hamari et al., 2015). Second, any exchange relation performed through collaborative platforms is evaluated by comparing the degree to which the contribution to the exchange brings fair rewards (Adams, 1963). This process is illustrated by the path from social exchange relations to perceived reciprocity. Third, the evaluation of reciprocity in relations affects the degree to which users commit themselves to sharing economy communities (Myers et al., 2013). The fourth stage represents the long-term impact of the participation in collaborative relations, in terms of perceived implications for the user's life.

This thesis examines consumer behaviour by breaking down the four-stage process into two research models. The first research model focuses on the antecedents of use behaviour, actual use and its effect on perceived impacts on life. By examining the relationships between those groups of factors, the research addresses the objectives of the thesis aimed to theorise and test the psychological and social determinants of use, as well as the effect on perceived social inclusion and subjective well-being. To ensure the theoretical robustness of the factors underpinning social exchange relations, this thesis adopts the social exchange theory perspective. This theory explains the principles of the social exchange relations and guides the selection of the constructs predicting use behaviour (Blau, 1964, Coleman and Coleman, 1994, Cropanzano and Mitchell, 2005).

The second research model focuses on the perceived reciprocity and its relation to commitment. The examination of that path helps tackle the objectives of the research aimed at understanding the determinants of perceived reciprocity and its role in commitment to sharing economy relations. The research utilises Equity Theory to theorise the factors that underpin the evaluation of perceived reciprocity in relations and explores the behavioural and cognitive outcomes resulting from the assessment. The adoption of the theory informs us about the psychological

basis of reciprocity perception and responses to unfair relations in the group and inter-personal context (Adams, 1963, Adams and Freedman, 1976, Walster et al., 1973).

Figure 11: Conceptual model of the thesis



The following sections of this chapter provide a justification of the theoretical frameworks adopted for this thesis and the development of the research models. Section 3.1 presents a review of the main theories in social psychology and provides the reasoning behind the selection of theoretical frameworks. Section 3.2 provides the theoretical background to the first research model and elaborates hypotheses, while section 3.3 discusses the rationale for adopting Equity Theory and the hypothesised relationships in the model.

3.1. Social Psychology Theories on Consumer Behaviour

Consumer behaviour in the sharing economy represents collaborative relations based on the interdependence on oneself and others, which can be explained by the theories of social psychology. Social psychology is a social science that explains individuals' experiences, beliefs and behaviour through their actual or implied interaction with other people (Allport, 1984). Therefore, the examination of the behaviour of sharing economy participants from the perspective of social psychology makes it possible to understand both the social and personal (cognitive, emotional) factors affecting behaviour.

There are four main directions in social psychology research which explain individuals' behaviour by focusing on social cognitions, social comparison, self and social reinforcement (Chadee, 2011). The focus on social cognition has stimulated the development of the theories explaining information processing, such as Cognitive Dissonance Theory, the Elaboration Likelihood Model, Attribution Theory and Reactance Theory. These theories shed light on mental activities, their triggers and subsequent behaviours. They explain the psychological states and reactions to inconsistent cognitions (Festinger, 1962) and threats (Brehm and Brehm, 2013), the factors that modify individuals' attitudes and persuasion (Petty and Cacioppo, 1986), and the cognitive processes underpinning causal judgment (Laczniak et al., 2001).

Social comparison research focuses on the processes influencing people's reasoning. This body of research revolves around theories including Social Comparison Theory, Social Learning Theory, Relative Deprivation Theory and Justice Theory. For example, Social Comparison Theory explains the mechanism through which people assess personal costs and rewards in social relations by comparing them with the costs and rewards of other people (Festinger, 1954). Social Learning Theory presents social behaviour as a result of learning through the observation of rewards and punishments for particular types of behaviour (Bandura and McClelland, 1977). Social Justice Theory refers to the principles of a balanced distribution of wealth relative to other actors in the society (Rawls, 2009). In a nutshell, these theories argue that social comparison is the fundamental cognitive process underpinning attitudes and behaviour.

Social Psychology research concerning self and identity includes theories, the most prominent of which are Social Identity Theory, Self-Categorisation Theory and Symbolic Interactionism. These theories help examine the circumstances of the categorisation of people and oneself in the group and predict the consequences of the categorisation in terms of intergroup behaviour (Haslam et al., 2000, Tajfel, 1974). The symbolic interactionism perspective helps understand how individuals are perceived through interactions with other members of the society. It states that individuals' interactions have a symbolic meaning, which consequently shapes their behaviour (Smith and Bugni, 2006).

The social reinforcement perspective in social psychology research is represented by theories such as Social Exchange Theory, Equity Theory and Interdependence Theory. The main premise of these theories is that individuals' behaviour and social interactions are based on the

reinforcement-punishment structure (Chadee, 2011). Specifically, Social Exchange Theory (SET) focuses on exchange relations resulting from the subjective cost-benefit analysis of exchange, facilitated by the structures of social organisation (Cook and Emerson, 1987, Cropanzano and Mitchell, 2005). Interdependence Theory is the part of SET which argues that parties in the social exchange are motivated to sustain relations if they can maximise rewards and minimise costs (Johnson and Johnson, 2002). Equity Theory argues that relationships between people are dependent on the degree to which inputs and outputs into these relations are equitable. Equity is the core of relations, as the perception of equity forms individuals' decisions, feelings and actions following exchange relations (Adams, 1963).

Given the above, Social Exchange Theory and Equity Theory can explain the behaviour of sharing economy participants. Compared to other theories in social psychology, they focus on experiences produced in social interactions, and they explain the factors, mechanisms and cognitions contributing to these experiences. Social Exchange Theory can provide information about the drivers that motivate users to engage in sharing economy transactions. The use of Equity Theory can help understand the conditions underpinning the perception of reciprocity in sharing economy transactions and explore the forms of behaviour that perceived reciprocity triggers. An extensive discussion of the theories and the justification of their fit to the objectives of the research are provided in the following sections.

3.2. Social and Psychological Antecedents and the Outcomes of Social Exchange

3.2.1. Theoretical Background: Social Exchange Theory

The thesis uses Social Exchange Theory as it can inform the investigation of the antecedents of exchange between actors and the social structures resulting from it. Social exchange is defined as *"the exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons or more"* (Homans, 1961). Social exchange theory can be used as a framework, in order to explain both utilitarian and sociological views on dyadic and collective relations within the social network (Cook and Emerson, 1987, Blau, 1964, Homans, 1961).

There are three main propositions of social exchange theory that inform the thesis. First, social exchange is stimulated by social capital. Social capital represents different forms of social entities, including norms, rules, information channels, expectations and obligations. These entities are embedded in the structures of social organisations. Social capital can not only facilitate but also restrict the development of social relations and their outcomes (Nahapiet and Ghoshal, 1998, Wasko and Faraj, 2005, Coleman and Coleman, 1994, Putnam, 1995). The outcomes may include power and equity distribution within social networks. Thus, the structural relation between the actors of the sharing economy platform reflects the number of valued resources the actors control and the balance of resource distribution against other actors (Coleman and Coleman, 1994).

The second proposition postulates that the stimulus to engage in exchange is based on the subjective cost-reward analysis, with the purpose of producing mutually rewarding relationships (Blau, 1964, Cropanzano and Mitchell, 2005). Cost and benefit factors derived from the social exchange are different from the economic exchange as the conditions and obligations are not clearly specified (Blau, 1964). In social exchange, people embark on relations with an expectation that the favour (i.e. contributions into relations) will be returned, though without the requirement to do it immediately. The lack of a specific time-frame of the return of favour makes social exchange long-term oriented, unlike one-off exchanges (Molm, 1997). According to Social Exchange Theory, the participation in the exchange of resources through sharing economy platforms is motivated by the social or utilitarian benefits that the person receives from other actors in the exchange (Blau, 1964). Whether reciprocation is generalised or negotiated, the behaviour of actors in sharing is opportunistic. In the case of non-monetary transactions, the exchange of resources through sharing platforms is grounded on the principle that peers give favour to one another, and the nature of the obligation and the timeframe for return is not specified. Actors evaluate the participation in exchange by weighing the likelihood of satisfying expected values (Friedkin, 1992, Blau, 1964). The more often individuals receive a reward for an action, the more likely they will engage in future actions under similar conditions (Homans, 1974).

The third proposition argues that social exchange is defined by the degree to which the cost of the transaction is considered to be fair by actors. The perception is dependent on individual norms of

fairness, and thus it can be subjective and should be interpreted from the users' perspective (Homans, 1961, Blau, 1964). The user perception should address the differences among people, in terms of exchange orientation, the differences in the comparison of costs and rewards over time and in different contexts (Varey, 2015).

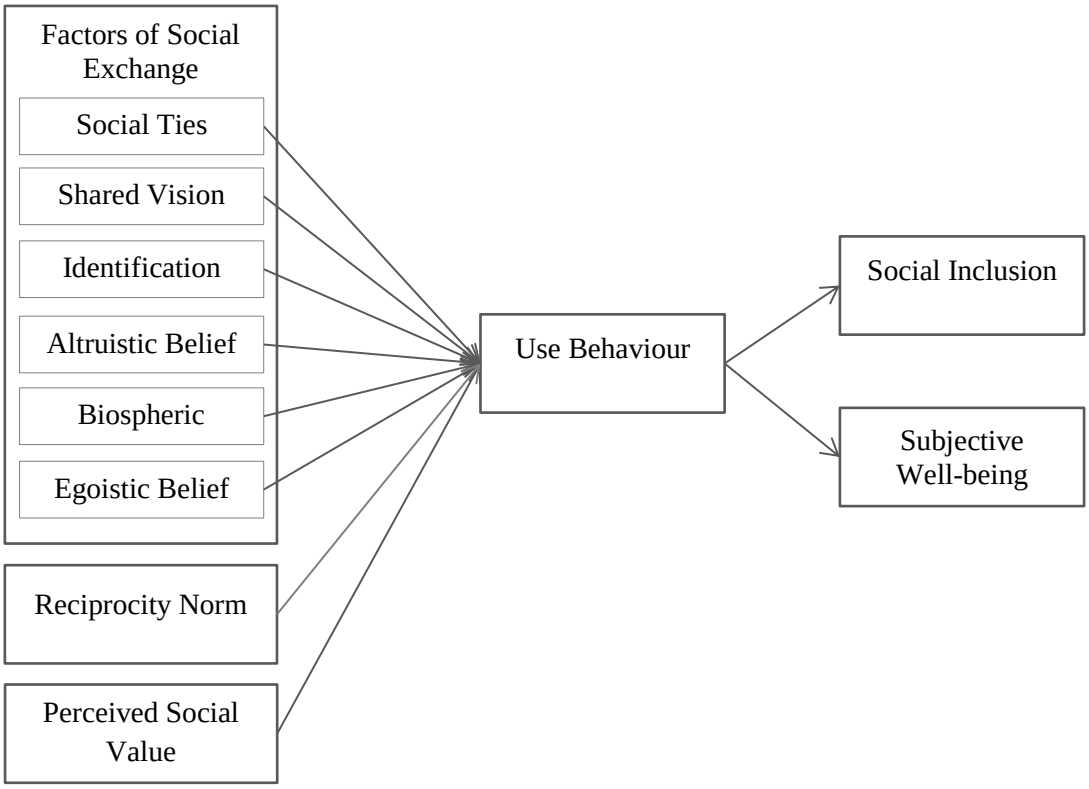
Social exchange theory encompasses a broad area of research under its domain. The framework does not delimit the types of costs and rewards that people use to evaluate the tradeoff of the behaviour. As a result, studies use context-specific measures of cost-reward assessment (Kanwal et al., 2020, Kankanhalli et al., 2005). For example, the theory was applied to predict the response of the community to infrastructural development. Factors such as a perceived negative impact and perceived benefits of interventions were examined in the relation to satisfaction and support towards those interventions. It was found that outcome behaviour can be predicted by a negative correlation with perceived negative impact and a positive correlation with perceived benefits (Kanwal et al., 2020). Another piece of research focused on the role of actual and potential costs against extrinsic and intrinsic benefits of sharing activities in organisations. The sharing practice was proved to be the result of the compromise between the input of effort to perform the practice, the obligation to reciprocate, organisational rewards (e.g. salary increase, incentives, job security), altruistic benefit (helping others) and perceived confidence about the positive outcome of the practice (Kankanhalli et al., 2005). Aside from the focus on costs and rewards, the literature studied factors enabling social exchange. For example, social capital in social exchange relations was examined in terms of their role in positive and negative behaviour within organisations. It was found that organisational social capital, reflecting collective commitment and self-sacrifice of the leadership, contributes to cooperative behaviour and undermines opportunistic behaviours (Mostafa and Bottomley, 2018). Social capital was examined not only as a factor facilitating the cooperation between people, but as a reward of relations. It was found that interpersonal interactions are driven by the expected maximisation of social benefits, such as enhanced social ties and networks (Wang and Liu, 2019).

Social Exchange Theory is an influential tool in explaining relationship models functioning on the basis of information systems (Stafford, 2008). It has been used in a number of studies to examine the effect of different constructs related to costs and rewards on the exchange practices in online systems (Kankanhalli et al., 2005, Tsai and Cheng, 2012, Geiger et al., 2017). For

example, the Social Exchange Framework was helpful in identifying the factors referring to costs and benefits of using online-based knowledge management systems, which has contributed to the utilisation of the system for sharing knowledge among system members (Kankanhalli et al., 2005). The propositions of the theory have guided studies exploring the utilisation of mobile health-based interventions designed to propose medication adherence among patients. Negative and positive reinforcement (i.e. cost and rewards) have been considered as encouraging or discouraging the use of the system (Liu and Varshney, 2020). The principle of the cost-benefit evaluation was also shown to be robust for studying the rationale for engagement in online social networking websites. The application of the theory in such contexts suggests that the opportunity to strengthen social ties and control privacy are considered against privacy risks entailed by using social media tools (Wang and Liu, 2019).

Given the propositions of the theory and prior research validating theory assumptions in different online/offline contexts, this thesis proposes the research model presented in Figure 12. This thesis argues that the participation in the sharing economy represents a social exchange, as an outcome of a consumer's analysis of expected rewards, the degree of costs borne of a lack of reciprocity and the effect of other psychological and social factors facilitating or inhibiting user interaction. Given the focus of this thesis to examine the social factors underpinning use behaviour, the theoretical model revolves around: 1) the factors of social capital that facilitate social exchange, 2) the expected degree of reciprocity and 3) perceived social values. The model also presents the outcomes of participation in the sharing economy in the forms of satisfaction, social inclusion and well-being. The relationships between variables are explained in the following sections.

Figure 12: Research model: the Antecedence and Outcomes of Social Exchange



3.2.2. Hypothesis Development

Social Capital Factors

This thesis adopted the framework of Nahapiet and Ghoshal (1998) to examine the effect of different factors of social capital that facilitate the interaction of users in the sharing economy. The framework is the result of a comprehensive analysis and classification of social capital into three dimensions, namely: 1) structural (network ties, network configurations and appropriable organisations), 2) cognitive (i.e. shared language and codes, and shared narratives) and 3) relational social capital (trust, norms, obligations and identifications). *Structural social capital* helps build connections between people through social interactions (Putnam, 1995). *Cognitive social capital* refers to resources that enable community members to have a common interpretation and understanding of events and things (Nahapiet and Ghoshal, 1998, Wasko and Faraj, 2005). *Relational social capital* contributes to the development of relations through

interpersonal trust, cooperative norms, obligations to participate in collective actions and identification with other members of the community (Nahapiet and Ghoshal, 1998, Coleman and Coleman, 1994, Putnam, 1995, Lewicki and Bunker, 1996). However, Nahapiet and Ghoshal (1998) focused on the examination of social capital in an organisational context. Later Wasko and Faraj (2005) adapted the framework to an individual-level context. The adaptation resulted in the exclusion of organisation-related constructs (i.e. network configurations and appropriable organisations). Another study by Tsai and Ghoshal (1998) reduced the cognitive dimension to only one construct, and conceptualised it as the shared vision. This facilitates the achievement of collective goals and embraces the essence of collective actions (Tsai and Ghoshal, 1998). Drawing on the aforementioned literature and taking into consideration the context of this research, the authors of this thesis used adapted structural and cognitive social capital constructs for the development of the hypotheses.

Structural Social Capital Factor: Structural social capital, such as social ties, can intensify the collaboration of people within communities, such as the sharing economy. The members of communities develop social ties through repeated interactions with each other (Coleman and Coleman, 1994). The likelihood of collective actions within communities increases with a high frequency of previous collaborations (Marwell et al., 1988). Social ties have a direct and mediated effect on exchange practices (Wasko and Faraj, 2005, Ellison et al., 2007, Tsai and Ghoshal, 1998). Connections within the community indirectly affect collaborative behaviour through the development of trust in members (Tsai and Ghoshal, 1998). The relationship between the density of social networks and the intention to engage in sharing is also mediated by attitude (Chow and Chan, 2008). According to the social capital framework, social ties directly affect users' engagement in online communities (Wasko and Faraj, 2005, Ellison et al., 2007). For example, bonding ties have been shown to be significant predictors of the use of social networking websites (Ellison et al., 2007). They significantly increase the likelihood of collaboration and contribution to online networks (Wasko and Faraj, 2005). Hence, the first hypothesis is that:

H1: Bonding social ties have a positive effect on the use of sharing economy platforms.

Cognitive Social Capital Factor: Shared vision is an important factor that underlies the work of communities, whose members are united by common perceptions of goals, rules of conduct and

ideas. Shared vision facilitates interpersonal communication and understanding, and encourages people to contribute to their communities. Shared goals make people see value in the collective exchange of goods and services (Tsai and Ghoshal, 1998). The facilitating role of shared vision has been examined in relation to collective practices (Tsai and Ghoshal, 1998, Wasko and Faraj, 2005, Kim et al., 2017). There are several ways in which this social capital factor can affect behaviour. It has a strong influence on behaviour when it is mediated by perceived trust in the members of a community (Tsai and Ghoshal, 1998). The path to behavioural intention can also be indirect through subjective norms and attitude to sharing (Chow and Chan, 2008). Shared vision was also found to be very significant when it came to testing its direct effect on collaborative relations (Li and Lin, 2006, Tsai et al., 2014). For example, it strongly contributes to the intensity of information sharing and the quality of information in the relationships between trading partners (Li and Lin, 2006). Also, common beliefs about organisational processes and work have been found to be a strategically important precondition for knowledge sharing between people within the same organisation (Tsai et al., 2014). Based on the above, the next hypothesis states that:

H2: Shared vision has a positive effect on the use of sharing economy platforms

Relational Social Capital Factors: Identification, norms and obligations make a positive contribution to social exchange and cooperation (Nahapiet and Ghoshal, 1998). *Identification* is defined as *"one's conception of self in terms of the defining features of self-inclusive social category*" (Bagozzi and Dholakia, 2002). It is manifested through the sense of belonging, emotional commitment and loyalty towards a community. The high level of unity with other members of a social group creates and strengthens motivation to exchange knowledge (Nahapiet and Ghoshal, 1998). Consequently, the identification that is inconsistent with other group members may hinder knowledge sharing practices (Chiu et al., 2006). There is evidence that identification has an indirect effect on the behaviour of people (Kwon and Wen, 2010, Barnes and Mattsson, 2017). Identification with the community underlies perceived usefulness and perceived encouragement to use social networking sites that are positively correlated with actual use (Kwon and Wen, 2010). When it comes to collaborative consumption, the effect of the sense of belonging with the accommodation renting community was found to be significant through the mediation of perceived enjoyment (Barnes and Mattsson, 2017). The identification with a community was also confirmed to be a predictor of satisfaction with services and the continuous

intention to use a car-sharing platform (Möhlmann, 2015). Hence, it can be assumed that identification has a direct influence on the use of sharing platforms.

H3: Identification has a positive effect on the use of sharing economy platforms

Pro-environmental beliefs and norms may be predictors of the use of sharing platforms. This argument draws on an extensive examination of the sharing economy literature. A systematic examination of qualitative and quantitative studies suggests that sharing practices are strongly associated with altruistic and pro-environmental initiatives (McArthur, 2015, Hong and Vicdan, 2016, Aptekar, 2016). For example, sustainability was one of the key influencing factors of intention to collaborate on accommodation and online marketplace platforms (Tussyadiah, 2016). In addition, perceived sustainability benefit had an indirect effect on collaborative consumption through perceived usefulness (Barnes and Mattsson, 2017). Similarly, altruistic value had an effect on actual use through perceived ease of use and social support of other group members (Kwon and Wen, 2010). In general, the correlation between pro-environmental beliefs and use behaviour can be explained by the value-belief-norm theory, which posits that pro-environmental behaviour is the result of the influence of personal norms, originating from the beliefs in adverse ecological consequences. The beliefs in adverse consequences are activated by three types of values: biospheric (the basis for the beliefs that the valued objects are threatened and pro-environmental actions need to be undertaken to reduce the threat), altruistic (pro-social values) or egoistic (value triggering resistance to environmental protection that can be associated with the belief that it will harm oneself) (Stern, 2000). Hence, in accordance with the value-belief-norm theory by Stern (Stern, 2000) and relevant evidence from the literature, this thesis posits that:

H4: a) altruistic and b) biospheric beliefs have positive effects on the use of sharing economy platforms; c) egoistic beliefs have a negative effect on the use of sharing economy platforms.

The *reciprocity norm* combines two forms of social capital factors (i.e. *obligations* and *norms*), because reciprocity refers to the condition under which a person is obliged or obliges others to reciprocate with another party in the exchange (Blau, 1964). The participation in the sharing economy can be based on negotiated and generalised reciprocity. Negotiated reciprocity implies a quantifiable and immediate return. Under generalised reciprocity, the exact form of reward and the time of payoff are not pre-determined. The exchange is based on the belief in supportive transactions (Belk, 2010, Sahlins, 1974). In the context of free room sharing, reciprocation can

fulfil the desire to make friends, whereby it helped demonstrate a feeling of compassion and support toward other members of the community (Kim et al., 2017). The expectation of reciprocity was one of the motivators to share knowledge in virtual communities (Chiu et al., 2006). When it comes to market-place settings, the perception of mutual benefits was proved to be a significant prerequisite of developing a positive attitude toward engaging in collaborative purchasing (Shiau and Luo, 2012). Based on the abovementioned discussion, the following hypothesis states that:

H5: Reciprocity norm has a positive effect on the use of sharing economy platforms

Perceived Social Values

This thesis adopts the conceptualisation of perceived value as a preferred outcome of behaviour, proposed by Holbrook and Corfman (1985). They defined value as "*an interactive relativistic preference experience . . . characterising a subject's experience of interacting with some object. The object may be any thing or event*" (p. 40). *Perceived social values* reflect the belief of the person that the objects or events represent symbolic meaning that will help him/her to play a particular social role. On the one hand, a person may engage in social relationships to satisfy personal needs (Belk, 1988, Solomon, 1983). For example, sharing economy users develop relations with peers through repeated social interactions, especially when sharing accommodation (Lampinen et al., 2015, Tussyadiah, 2016, Böcker and Meelen). Travellers receive the opportunity to feel closer to local communities by interacting with hosts (Priporas et al., 2017). On the other hand, behaviour may represent a means to establish one's own social identity (Belk, 1988, Solomon, 1983, Belk, 2013). For example, the sharing economy realises the idea of people having equal access to commodities while reducing overproduction, natural resources and ecological pollution (Aptekar, 2016, Hong and Vicdan, 2016). The perceived social value is strongly associated with the perceived usefulness of the sharing economy platform for the welfare of the community (Barnes and Mattsson, 2017). Given the above, the use of sharing economy platforms may be influenced by the desire to be seen as caring for the community, as well as to satisfy personal needs for social interaction:

H6: Perceived social values have a positive effect on the use of sharing economy platforms.

The Outcomes of Using Sharing Platforms

Positive outcomes of sharing reflect the degree to which individual goals are met (Fremstad, 2017, Tussyadiah, 2015, Tussyadiah, 2016, Hwang and Griffiths, 2017) and can be measured by the extent to which users secure sustained benefits, such as social inclusion and well-being. *Social inclusion* occurs when people at risk of social exclusion receive the opportunity to have a full social, cultural and economic life, as well as enjoy well-being and normal living standards (Huxley et al., 2012). The person is socially included when he or she feels integrated with the society at the legal (being an equal citizen in society), the economic (e.g. availability of job, financial resources), the social (benefit from public social services) and the interpersonal (having family, friends and social network) levels (Huxley et al., 2012). *Well-being* can be conceptualised as subjective well-being because it reflects the subjective definition of the standard of living and subjective evaluation of the degree of someone's own happiness. Subjective well-being is a multifaceted concept, embracing the degree of satisfaction with life, work, relations, the experience of mood, emotions and other feelings (Diener, 2000).

Participation in the sharing economy may facilitate social inclusion and well-being through the development of a social network, the sense of belonging with other members of a community, the reinforcement of self-confidence. The interaction with other parties of relations enables platform users to exploit resources that otherwise would not be affordable, implement environmental goals and other meaningful activities (Yang et al., 2017, Ferrari, 2017, Hong and Vicdan, 2016, Anderson et al., 2013). For example, time-banking is the form of social exchange of services when the contribution of the parties is measured and reciprocated by time-units, instead of money. Time-banking is a reflection of social cohesion, solidarity, support and the pro-social values of the community, promoting equity and social inclusion. This form of exchange is based on collective values that encourage meaningful relations between members of the community and positively affect the sense of overall life satisfaction (Laamanen et al., 2018, Burroughs and Rindfleisch, 2002). Reciprocity, trust, care, equity, integrity and the inclusion of each member of the community foster collective well-being, while efficient collaborative production promotes environmental sustainability (Laamanen et al., 2015, Belk and Llamas, 2012, Llamas and Belk, 2013). In addition, the sharing economy boosts informal employment, contributing to the welfare

of socially-excluded groups and encourages new small-scale ventures, improving the financial situation of communities (Pyka, 2017). For example, the adoption of ridesharing apps by taxi drivers positively correlates with income and access to technologies, which in the long term may contribute to social equality (Liu and Wayne Xu, 2019). In general, the sharing economy transforms the consumption practices by emphasising hedonic and authentic experiences that are positively associated with a heightened self-image and well-being (Davidson et al., 2018, Mody et al., 2019). Hence, this thesis posits that:

H7: The use of sharing economy platforms has a positive effect on a) social inclusion and b) subjective wellbeing.

3.2.3. Moderators

This thesis proposes that age, income, use frequency and use intensity have moderating effects on the relationship between use behaviour and outcomes. Published research has shown that the perceived values of the use of the sharing economy differ depending on the socio-economic background of the respondents and the frequency of use (Tussyadiah and Pesonen, 2016, Gullstrand Edbring et al., 2016, Hwang and Griffiths, 2017). However, their moderating effects on the strength of the relationship between use behaviour and long-term societal benefits have not been investigated. Given the little empirical evidence about the perceived effect of the sharing economy on users' social inclusion and well-being, controlling for moderating variables will provide a more comprehensive and holistic insight. Previous research on the relationship between demographic variables and respondents' perceived life satisfaction provides the grounds to propose that age and income moderate the strength of perceived well-being and social inclusion after using sharing economy platforms (Graham, 2004, Okun et al., 1984, Senik, 2003, Devlin, 2005). The majority of the literature provides evidence that the respondents of a higher economic status experience a higher degree of life satisfaction (Bradburn and Caplovitz, 1965, Graham, 2004, Senik, 2003). These findings are in line with the economic conceptualisation of societal welfare, equating the quality of life to the economic status of the population (Senik, 2003). Similarly, low-income people suffer social exclusion, resulting from deprivations in the domains of social interaction, consumption of goods, political engagement and access to financial services (Saatcioglu and Ozanne, 2013, Devlin, 2005). Hence, the positive effect of the sharing economy

on overall well-being and social inclusion is more likely to be observable for wealthier users. Age correlates with income level (Bradburn and Caplovitz, 1965). It can be assumed that as people grow older, they enhance their economic status and social activity, thus having higher chances of feeling life satisfaction and being socially included (Devlin, 2005, Okun et al., 1984). However, the prior research found that younger users were reported to have a higher quality of life compared to older ones (Bradburn and Caplovitz, 1965). In addition, when it comes to the sharing economy, younger users find the new economic system more appealing, which can be explained by a higher degree of innovativeness inherent in the younger generation (Tussyadiah, 2015). Given the context of this research, it can be assumed that since younger people find the sharing economy more beneficial, they are more open to the positive outcomes of collaborative consumption. In view of the above, the next hypothesis states that:

H8a: Age moderates the effect of use behaviour on social inclusion and subjective well-being in such a way that younger people are more likely to feel socially included and experience well-being.

H8b: Income moderates the effect of use behaviour on social inclusion and subjective well-being in such a way that people with a higher income are more likely to feel socially included and experience well-being.

Social inclusion and well-being represent a cumulative and longitudinal outcome, rather than a one-time result. It is logical to assume that more frequent and intense use of sharing platforms results in a higher degree of perceived well-being and social inclusion. This assumption is supported by the findings from the literature confirming that the frequency of interactions facilitates the effect of social interaction on perceived happiness and overall life satisfaction (Cooper et al., 1992). In addition, the quality of life in the social and economic domains has been heavily contingent on the growing use of services enabled by the Internet (Broadbent and Papadopoulos, 2013). In a similar vein, the internet-enabled sharing economy offers economic, hedonic and social benefits to its users (Hamari et al., 2016). Intensive and consistent exposure to those benefits makes it possible to translate them into the long-term goal of building a socially-inclusive society.

H9a: Use frequency moderates the effect of use behaviour on social inclusion and subjective well-being in such a way that people using sharing economy platforms more frequently are more likely to feel socially included and experience well-being.

H9b: Use intensity moderates the effect of use behaviour on social inclusion and subjective well-being in such a way that people using sharing economy platforms more intensively are more likely to feel socially included and experience well-being.

A summary of supportive evidence about the relationships between the main variables and moderation effects is presented in Table 6.

Table 6: Supportive evidence on hypotheses

Hypothesis	Constructs	Path	Positive effect	Negative effect
H1	Social Ties (ST)	ST--> TR --> B	(Tsai and Ghoshal, 1998)	
		ST--> ATT --> B	(Chow and Chan, 2008)	
		ST --> B	(Wasko and Faraj, 2005, Ellison et al., 2007)	
		ST --> B		(Kim et al., 2017)
H2	Shared Vision (SVS)	SVS -->TR --> B	(Tsai and Ghoshal, 1998)	
		SVS --> TR --> BI	(Chow and Chan, 2008)	
		SVS --> ATT --> BI	(Chow and Chan, 2008)	
		SVS --> B	(Wasko and Faraj, 2005)	
		SVS --> B		(Chiu et al., 2006)
H3	Identification (ID)	ID --> PU/PENC --> B	(Kwon and Wen, 2010)	
		ID --> PEN --> B	(Barnes and Mattsson, 2017)	
		ID --> SAT/CIU	(Möhlmann, 2015)	
H4a-b	Pro-Environmental Beliefs (ProE)	AV --> PEOU --> B	(Kwon and Wen, 2010)	
		ProE --> B	(Stern, 2000)	
		ProE --> B		(Möhlmann, 2015)
H5	Reciprocity	REC --> BA	(Shiau and Luo, 2012)	

	Norm (REC)	REC --> B	(Chiu et al., 2006)	
H6	Social Value (SV)	SV --> SAT	(Tussyadiah, 2016)	
		SV --> PU --> BI	(Barnes and Mattsson, 2017)	
		SV --> CIU		(Tussyadiah, 2016)
H7a	Social Inclusion (SI)	CO --> SI	(Burroughs and Rindfleisch, 2002)	
H7b	Subjective Well-being (SWB)	CO --> SWB	(Burroughs and Rindfleisch, 2002)	
H8a	Age	B -- > SI	(Devlin, 2005)	
		B -- > SWB	(Okun et al., 1984)	(Bradburn and Caplovitz, 1965)
H8b	Income	B -- > SI	(Devlin, 2005, Saatcioglu and Ozanne, 2013)	
		B -- > SWB	(Senik, 2003, Ferrer-i-Carbonell, 2005, Graham, 2004)	(Ferrer-i-Carbonell and Gowdy, 2007)
H9a	Use Frequency	B -- > SI	(Lättman et al., 2016)	
		B -- > SWB	(Cooper et al., 1992)	
H9b	Use Intensity	B -- > SI	(Broadbent and Papadopoulos, 2013)	
		B -- > SWB	(Broadbent and Papadopoulos, 2013)	

Note: Trust (TR), Use Behaviour (B), Attitude (ATT), Behavioural Intention (BI), Perceived Usefulness (PU), Perceived Encouragement (PENC), Perceived Enjoyment (PEN),Satisfaction (SAT), Continuous Intention to Use (CIU), Altruistic Value (AV),Perceived Ease of Use (PEOU), Behavioural Attitude (BA), Collective Orientation (CO)

3.3. Reciprocity and Commitment in the Sharing Economy

3.3.1. Theoretical background: Equity Theory

This thesis adopts Equity Theory as a theoretical framework to examine reciprocity and commitment in the sharing economy (Adams, 1963). The theory originates from the field of organisational psychology to bridge the gap in the literature lacking a theoretical explanation of the psychological basis of inequity perception by employees. The theory provides an explanation as to how the fairness of exchange between people is formed and proposes ways to regulate the outcome of relations (Adams, 1963, Adams and Freedman, 1976). Equity Theory incorporates a number of mini-theories in social psychology (e.g. the theory of delinquencies, the theory of moral sentiments) under one umbrella to explain individuals' motivation to perform a particular behaviour and individuals' responses to reciprocal/nonreciprocal relations. Beside the explanatory robustness, the use of the theory makes it possible to predict how individuals may behave by assessing the relative outcomes of relations (Walster et al., 1973).

Equity Theory is based on three theories of social science and psychology: Social Exchange Theory, Social Comparison Theory and the Theory of Cognitive Dissonance (Festinger, 1962, Festinger, 1954, Blau, 1964). Social Exchange Theory explains the context where equity occurs. It is a broad theoretical area, which postulates that social relations are rooted in subjective evaluation of the costs and benefits of participating in relations (Blau, 1964, Homans, 1961). Social Exchange Theory brings in the notion of "rewards" and "costs" – i.e. "output" and "input" of social exchange relations (Blau, 1964, Adams, 1963). Input relates to the contribution that the participant in social exchange makes to initiate relations. Input may denote different objects and forms, such as education, experience, skills, social status, effort and other attributes of the person, such as personal characteristics and the level of attractiveness. Those variables determine what people bring into relations, hence, they were defined as inputs. Those inputs are perceived by the contributors and should be measured against their relevance to the particular social exchange situation and should be recognisable by the parties of exchange. Output refers to the amount of reward that an individual receives from the participation in relations with other individuals and organisations. Outputs may represent financial rewards, intrinsic outcomes of behaviour, social

and symbolic benefits and status. Similar to inputs, outputs were characterised in terms of recognition and relevance (Adams, 1963, Adams and Freedman, 1976).

Social Comparison Theory explains the mechanism through which people evaluate the degree to which the distribution of costs and rewards is fair or unfair in social exchange relations (Festinger, 1954). The rationale for using the social comparison principle in Equity Theory stemmed from prior evidence. It was found that the evaluation of perceived fairness by employees of different groups in one division in an organisation made it possible to conclude that the rewards were not considered to be fair if input was higher compared to that of other colleagues (Homans, 1953). Social Comparison Theory was the basis to propose another two key concepts, namelly, "person" and "others", which are imprtant for evaluating equity in relations. "Person" is an individual evaluating fairness in relations, while "others" can be any referent people against whom equity is compared. It can even be the person himself/herself, but at another point in time/situation/circumstances (Adams, 1963). The literature on social comparison identified two directions of comparison: downward comparison and upward comparison. Downward comparison means that people look at more disadvantaged members of the group to evaluate their own input and output, and thus they may perceive the distribution of rewards to be fair to themselves. Upward comparison means that people look at other more advantaged members of the group in order to evaluate their own rewards (Wills, 1981).

Cognitive Dissonance Theory explains the behaviour of people when they experience stress induced by contradictory cognitions and the motivation of people to reduce stress by passive or proactive measures (Festinger, 1962). The utilisation of Cognitive Dissonance Theory has contributed to the understanding of the emotional and behavioural consequences of relations evaluating costs and benefits. Drawing on supporting evidence and the theoretical framework of cognitive dissonance (Festinger, 1962) the effects of inequitable relations have been proposed (Walster et al., 1973, Adams, 1963, Adams and Freedman, 1976).

Equity Theory provides a detailed account to three main behavioural processes this research focuses on (Walster et al., 1973, Rosette and Koval, 2018, Hogreve et al., 2017). The first process underlines the evaluation of reciprocity, which is contingent on the degree to which individuals perceive the relations to be fair. Perceived justice of relations results from the evaluation of the output of relations against input into those relations (Walster et al., 1973, Hart et al., 2015). The

disproportion between contributions and rewards is associated with negative emotions, although a negative affective state is not always confirmed for exchange relations when rewards are bigger than contributions (Greenberg, 1987, Liu and Brockner, 2015). The perception of justice is a subjective process. The degree to which an individual perceives the value of the relationship can be partly influenced by personal factors and social norms (Walster et al., 1973, Daverth et al., 2016).

The second process which underpins the evaluation of reciprocity is social comparison. This is the comparison of individuals' input/output with the input/output of other people. In order to perceive reciprocity in relations, individuals need to receive a reward which is proportional to the amount of their input into relations and equal to the ratio of the input/output of others (Walster et al., 1973, Adams, 1963, Lastner et al., 2019). There are two comparison strategies. Individuals either refer to a "specified" referent person or a "generalised other" to draw the comparison. The specified person belongs to inner circles. When using this comparison strategy, the subject of relations has a dilemma about pursuing personal self-interest or collective goals. In other words, individuals need to find a compromise between personal benefit-maximisation and collective interests, as the interests of the two are in conflict, thus causing negative emotions. Generalised comparison assumes comparing one's input/output ratio against the commonly accepted standards or predefined social norms (Greenberg, 1987).

The last process explains emotional and behavioural consequences following the perception of reciprocity. It is believed that reciprocity evaluation resulting in perceived negative (the perception that an individual received less rewards compared to contributions) and positive inequity (the perception that rewards are greater than the contributions) leads to stress (Walster et al., 1973, Adams, 1963, Biron and De Reuver, 2013) and induces emotions like guilt and anger (Katyal et al., 2019, Sherf and Venkataramani, 2015). The relations producing output that is discrepant from input trigger behaviour such as organisational absenteeism or the redistribution of resources. Such behaviours aim to compensate or take revenge for the lack of reciprocation (Biron and De Reuver, 2013, Rosette and Koval, 2018, Malc et al., 2016). The cognitive processes, such as self-affirmation, denial of responsibility, justification of inequity, devaluation of the input of the other party of relations may refer to the emotion-focused measures of inequity restoration. Compensation for inequity (increase rewards to another party), self-deprivation

(decrease reward to oneself to equate with the reward of another party) and retaliation against the party of relations causing inequity fall into the pro-active behavioural measures to compensate for inequity (Walster et al., 1973, Folkman and Lazarus, 1988, Folkman and Lazarus, 1990).

Apart from the theoretical rationale, the justification for using the theory in the research stems from its wide application for exploring human behaviour in social exchange relations in a wide range of settings. A major body of knowledge has been generated in the domain of organisational psychology. The framework has been used to study the satisfaction of employees, the distribution of rewards in companies and the reaction towards the unequal distribution of rewards (Fizel et al., 2002, Spencer and Rupp, 2009, Herriot et al., 1994, Hallock et al., 2004). The principles of Equity Theory have been used to examine the effect of fairness perception on employees' negative and positive behaviour (Janssen, 2001, Moorman, 1991, Greenberg, 1990). Specifically, theft represents a negative behaviour, which can result from the response to inequity with the purpose of redistributing rewards (i.e. compensate for pay cuts) and lessen the perception of inequity (Greenberg, 1990). In contrast, organisational citizenship behaviour represents a positive outcome resulting from employees' perception that they are being treated equitably and rewards are fair (Moorman, 1991). Also, the Equity Theory framework was used to explore the moderation effect of fairness perception on the relationship between job demands, job performance and job satisfaction. In conditions of fair effort-reward allocation, people tend to perform better and feel more satisfied (Janssen, 2001).

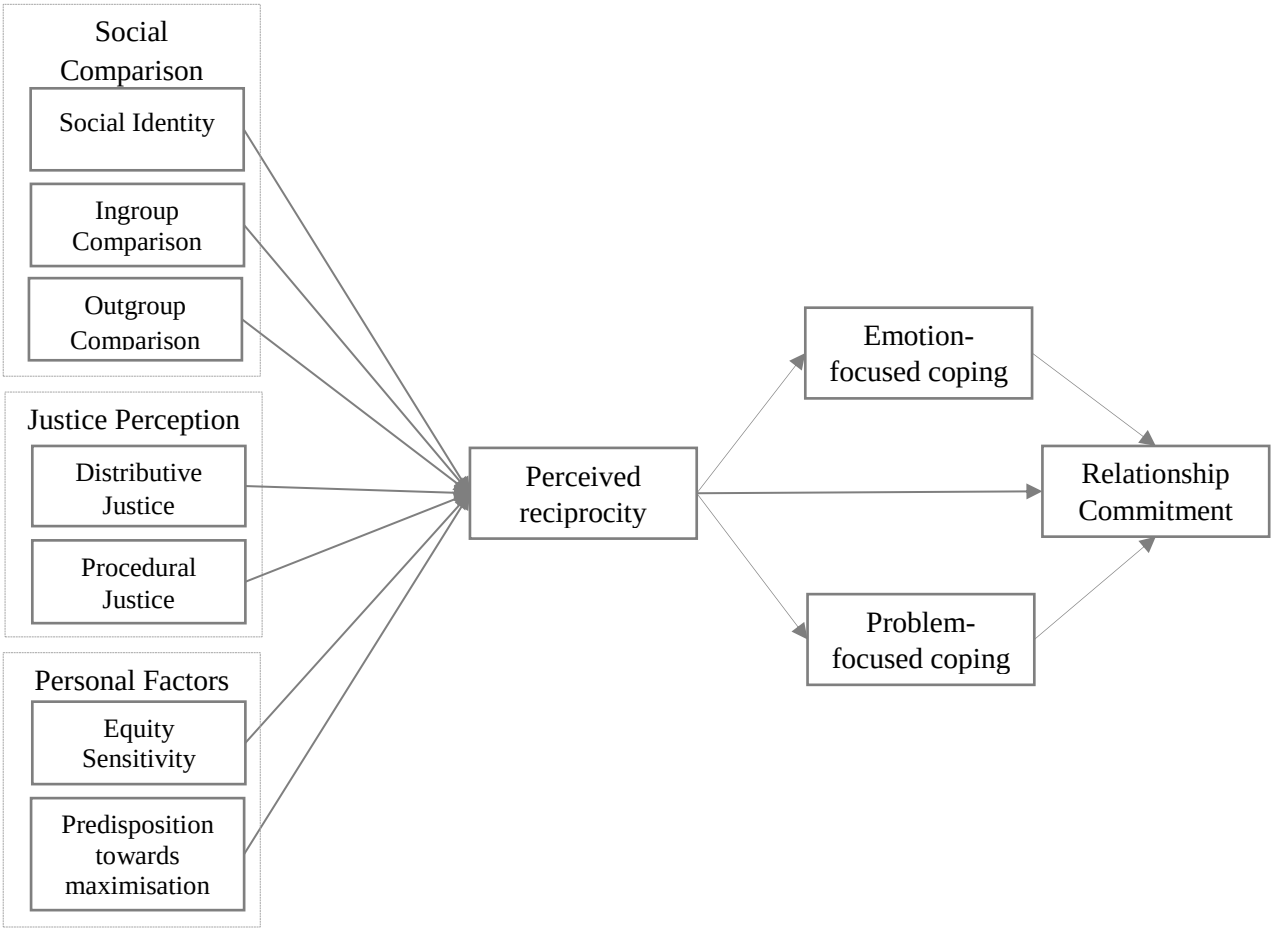
Equity Theory has motivated research in economics. Studies used the theory to propose the wage-effort hypothesis and discuss implications for the labour market (Akerlof, 1978, Jane et al., 2009). It has been suggested that when actual wages fall short of employees' fair wage, employees tend to engage in withdrawal behaviour. The hypothesis was consistent with observed wage differentials and unemployment patterns, which confirmed the power of the theory in explaining economic indexes (Akerlof, 1978). The assumptions of Equity Theory were confirmed in a study investigating short- and long-term implications of pay dispersion for publicly traded firms in multiple industries. A longitudinal analysis made it possible to conclude that pay dispersion has different effects on a firm's short-term performance and their trend in long-term performance over the ten-year time (Connelly et al., 2016). Also, the theory was used to investigate the firm-level consequences entailed by CEO underpayment in an emerging economy.

It was found that underpayment reduced firm value in poorly-governed firms, while overpayment had no effect on firm value (Gyapong et al., 2020). From the marketing perspective, the perception of price fairness was found to be a key factor in examining consumer behaviour (Darke and Chung, 2005, Darke and Dahl, 2003).

With the development of IS research, Equity Theory was applied to explain users' behaviour with information systems. On the one hand, the theory was used to investigate the effect that reciprocal relations have on behaviour. For example, the equitable needs fulfilment suggested by the theory successfully predicted the information systems' implementation, such as mobile dating apps, knowledge sharing and virtual communities (Au et al., 2008, Alexopoulos et al., 2020). For example, the theory helped explain how an over-benefiting party in relationships is more likely to use a dating app. That finding supports the theory's assumption whereby a positive inequity correlates with reduced commitment to relations (Alexopoulos et al., 2020). The results of another study demonstrated that the perception of online justice indirectly affects value co-creation behaviour (Chou et al., 2016). On the other hand, the theory was used to explain the motivational factors driving reciprocity in the online context. It was found that the reciprocal exchange of resources in online communities is underpinned by a feeling of indebtedness towards other members of the community (Feng and Ye, 2016).

The proposed research model of this thesis suggests that: 1) the factors pertinent to social comparison, justice perception and personality positively affect perceived reciprocity, and 2) investigation of perceived reciprocity subsequently leads to emotional and behavioural consequences (Figure 13). The proposed relationships are explained in the following sections.

Figure 13: Research model: Reciprocity and Commitment in the Sharing Economy



3.3.2. Hypothesis Development

Antecedents of Reciprocity Perception

Social Comparison: The processes of reciprocity evaluation and input/output comparison are dependent on social identity. Social identity is the belief of oneself being part of a particular social group (Turner, 1975, Tajfel, 1974). From the perspective of social psychology, the categorisation of oneself into a certain social group increases the likelihood of cooperation with members of the group (Anthony, 2005). Individuals with strong social identity believe in equitable relations contributing to trusting behaviour (Tanis and Postmes, 2005). The likelihood of cooperation in groups in the condition of salient social identity is preconditioned by the

process of comparing the outcomes of cooperation with either ingroup or outgroup members. The processes of comparing outcomes in social groups have been explained through competing theoretical stances. On one hand, the dependence of cooperation within groups on social identity can represent in-group favouritism, which is a biased evaluation of cooperation with members of the same group compared to people outside of it. The identification of oneself with the group increases self-esteem and the desire to distinguish this group from others (Tajfel, 1974). A rational explanation of the favouritism assumes that it is self-interest and awareness of the interdependency of one member of the group on another that makes people cooperate with group members rather than seek out cooperation outside of the group. The behaviour of group members is driven by the goal to maximise the chances of reciprocal relations by favouring (i.e. allocating rewards to) members within the same social group (Rabbie et al., 1989, Karp et al., 1993). However, there is an assumption that the positive outcome of cooperation in social groups cannot be accounted for by the mere motive of self-interest (Velez, 2015, Tavares et al., 2016). Irrespective of the amount of reward allocated in collective actions, social identification with a group reconfigures the cost-benefit analysis of relations in favour of the group and initiates mechanisms of compensation (Tavares et al., 2016), which can balance reciprocity in relations. By identifying oneself with social groups, individuals extend the concept of the self and think of themselves in relation to other social objects and subjects in the group (Coleman and Coleman, 1994). Moreover, perception of the behaviour of group members may be positively biased, because of the conflict that the negative perception potentially creates in individuals' cognition. Particularly, because one individual identifies other social group members with him/her self, their negative behaviour may create internal inconsistency. To preserve internal consistency, people with stronger group identity are more likely to be positive about the outcome of social relationships, continue group membership and contribute to the relationship (Rosenblat and Stark, 2016, Tavares et al., 2016). Given the above, the first and the second hypotheses state that:

H1: Social identity has a positive effect on the perceived reciprocity of relations in the sharing economy.

H2: a) The comparison of one's own outcomes with the outcomes of other members in sharing economy communities has a positive effect on perceived reciprocity, while b) the comparison

with the outcomes of people outside of sharing economy communities has a negative effect on the perceived reciprocity of relations.

Justice Perception: Perceived distributive and procedural justice are the two types of cognition which result from social exchange relations (Folger and Konovsky, 1989, McFarlin and Sweeney, 1992). Perceived distributive justice refers to the perception that the amount of reward for the input in exchange is fair (Folger and Konovsky, 1989, Adams, 1963). Perceived procedural justice refers to the degree to which an individual perceives the means of rewards distribution to be fair (Folger and Konovsky, 1989). The assumption that distributive and procedural justice contributes to perceived reciprocity in relations stems from evidence from prior literature. The findings of the studies suggested that these two types of cognition lead users to believe that the outcome of relations is favourable for them (Rubenstein et al., 2019, Chan and Lai, 2017). For example, distributive justice was found to be a predictor of satisfaction and continuous behaviour intention (Chiu et al., 2007, Chan and Lai, 2017). If distributive injustice is not perceived, people feel emotional exhaustion as a result of relations (Piccoli and De Witte, 2015). While distributive justice is mostly associated with personal outcomes, such as satisfaction with personal rewards, procedural justice usually reflects a more general assessment of systems or organisations. As a result, procedural justice is considered to have a more long-term effect on behaviour than distributive justice (McFarlin and Sweeney, 1992, Rubenstein et al., 2019). For example, fair procedures have positive long-term implications. Perceived procedural justice triggers a positive behaviour benefiting another party of exchange as an act of reciprocation for fair treatment (Rubenstein et al., 2019). A positive evaluation of procedures enabling relations can translate into the commitment to the other party (McFarlin and Sweeney, 1992). In addition, the perception of fair procedures gives the feeling of control over procedures to the receiving party in relations. The control over procedures mitigates any risks incurred by the relations with the providing party and increases the likelihood of continued cooperation (Zhou, 2013). Given the above, both distributive and procedural justice perceptions are important for the positive evaluation of the outcome of an exchange. Hence, the next hypothesis is:

H3: a) Distributive justice and b) procedural justice have a positive effect on reciprocity perception in the sharing economy.

Personality Factors: The perception of reciprocity is subjective and may vary from one person to another (Walster et al., 1973, Daverth et al., 2016). The equity sensitivity variable has been invariantly used to explain the deviation of the perception of rewards and inputs in relations, based on individuals' psychometric characteristics (King Jr et al., 1993, Huseman et al., 1987, Bourdage et al., 2018). Equity sensitivity differentiates three types of people that can be placed along a continuum (Huseman et al., 1987). On the one end of the continuum are equity benevolents, who tend to accept a negative distribution of rewards in relation to oneself. For them, the likelihood of getting a satisfactory outcome of relations is high, as the input of resources that they invest in exchange relations can exceed the output (Huseman et al., 1987). The other extreme of the continuum is equity entitleds. In contrast to benevolents, they have an output-focused expectation. Entitleds are intolerant to unfair rewards allocation and prefer to receive more than they contribute into relations (King Jr et al., 1993). The middle ground between the two personalities is equity sensitive people, whose fairness perception is dependent on the proportional ratio of output against inputs contributed to relations. To achieve a satisfactory result of relations, there should not be any discrepancy in rewards allocation relative to contributions made (King Jr and Miles, 1994).

Equity sensitivity has been used both as a predictor and moderator of behaviour (Shore et al., 2006, Restubog et al., 2007, Bourdage et al., 2018). For example, equity sensitivity has been used to measure the moderating role of personality in the relationship between behaviour and response (Shore et al., 2006, Restubog et al., 2007). Entitleds are significantly less satisfied with the outcome compared to benevolents when contributions exceed rewards, while the difference in satisfaction level is minimal when rewards are greater than contributions (Shore et al., 2006). Another stream of research used equity sensitivity to investigate its role in individuals' response to inequitable relations (Bourdage et al., 2018, Westerlaken et al., 2017). It was found that the tendency towards benevolence predicts a positive attitude and voluntary commitment to the social group, while the tendency towards equity entitlement contributes to deviant behaviour (Bourdage et al., 2018). In a similar vein, the sense of entitlement decreases the desire to reciprocate (Westerlaken et al., 2017). Given the above, the next hypothesis states that:

H4: Equity sensitivity has an effect on reciprocity perception in the sharing economy, whereby benevolent people are more likely to perceive the reciprocal outcome of relations

The other personality factor that can affect the perception of the outcomes of exchange relations is an individual's predisposition to maximisation. This personality trait has been widely used to illustrate individual differences in decision-making and explain individuals' variance in post-decision satisfaction depending on the predisposition to maximise the outcome (Iyengar et al., 2006, Karimi et al., 2018). People with a tendency to maximise (maximisers) pursue the best choices, as a result of an extensive search for and analysis of alternatives. The opposite to maximisers are satisficers, who search for alternatives until they attain the option that satisfies the initial objective without questioning the choice and without engaging in counterfactual thinking about potential better options they might have (Schwartz et al., 2002). Individuals who strive for the maximisation of outcomes might achieve better results, but still feel unsatisfied due to potentially better choices that they might have missed (Iyengar et al., 2006, Schwartz, 2004). The negative relationship between the predisposition towards maximisation and the positive perception of the outcome is more likely in nonutility-driven relationships. In such relationships, people do not assess alternative outcomes rationally and rigorously (Herrnstein, 1990). Sharing economy relations can be driven by non-rational motives, such as the maximisation of the utility of products for the benefit of society and the environment rather than oneself (Schneider, 2017). Hence, it can be assumed that reciprocity in collaborative relations is more likely to be perceived by satisficers. Unlike maximisers, satisficers tend to improve their attitude to the choice if it does not meet their expectations, which increases satisfaction with the choice (Sparks et al., 2012). In line with the above findings, the fifth hypothesis states that:

H5: Predisposition towards maximisation has a negative effect on reciprocity perception in the sharing economy.

Consequences of Reciprocity Perception: In this thesis the authors postulate that the perceived reciprocity of relations contributes to the commitment of individuals to the community of sharing economy platforms for two reasons. First, the relations of people are built on the expectation that their contributions will be rewarded (Walster et al., 1973). For example, a recent study confirmed that the use of sharing economy platforms is driven by the expectation that the exchange in communities is reciprocated (Davlembayeva et al., 2019). People enter into social relations to be reciprocated and ensure trustworthy behaviour (Thielmann and Hilbig, 2015), which is an important contributor to relationship commitment (Wang et al., 2020). Second, given that social

exchange relations are driven by reciprocity norms, the success in achieving reciprocal relations is consistent with prior expectations. The consistency in cognitions drives satisfaction with the outcome and subsequent commitment (Chye Koh and Boo, 2004). The direct and indirect effect of reciprocity on the positive outcome of relations has been confirmed empirically (Myers et al., 2013, Griffin and Hepburn, 2005, Coyle-Shapiro et al., 2002). Reciprocal relations were proved to foster commitment, contribute to satisfaction with relations and communication between the parties (Myers et al., 2013). Also, reciprocity was found to have a mediating effect on commitment through trust (Coyle-Shapiro et al., 2002). Reciprocation in the form of support and good treatment of social group members leads to commitment, which is manifested by an emotional attachment to the group (Griffin and Hepburn, 2005).

H6: Reciprocity perception has a positive effect on relationship commitment.

The relationship between reciprocity and commitment can be indirect through coping mechanisms, as there are strategies that are used to cope with the stress, arising from the inconsistency between a prior expectation of reciprocal relations and the actual outcome (Walster et al., 1973, Adams, 1963, Biron and De Reuver, 2013). Stress may trigger physical and psychological responses aimed at justifying or compensate for the lack of reciprocity to relieve stress (Watkins et al., 2006, Walster et al., 1973, Lawrence and Callan, 2011). The perception of nonreciprocal exchange in relations may cause emotional exhaustion and a feeling of reduced personal accomplishments. Individuals tend to distance themselves from others who are being unfair in relations as a coping mechanism to alleviate an emotionally negative state (Bakker et al., 2000). Alternatively, individuals use pro-active measures, such as revenge, to compensate for unequal reciprocation. Such behaviour may be in the form of negative word-of-mouth or actions aimed at causing harm to the other party of relations and relieve stress (Malc et al., 2016, Zdaniuk and Bobocel, 2012). The two mechanisms that can be used to measure the degree to which one copes with stress are problem-focused and emotion-focused coping (Lazarus, 1998). Problem-focused coping refers to deliberate and rational activities that are aimed at changing the environment and/or adjusting one's own behaviour with the purpose of eliminating the problem causing stress (Folkman et al., 1986). That means that sharing economy participants need to undertake measures to compensate to the other party of transactions for the lack of reciprocity. Emotion-focused coping refers to the cognitive and behavioural activities aimed at eliminating

negative emotion, without affecting the problem causing those emotions (Folkman et al., 1986). For example, users of sharing economy platforms may adjust the perception of the consequences of inequitable relations, deny the seriousness of the situation or simply govern their emotions. Although emotion-focused coping can help reduce stress, it may be less effective in maintaining behaviour (Strutton and Lumpkin, 1994). Therefore:

H7: a) Reciprocity perception positively affects problem-focused coping and b) problem-focused coping positively affects relationship commitment.

H8: a) Reciprocity perception positively affects emotion-focused coping and b) emotion-focused coping negatively affects relationship commitment.

3.3.3. Moderators

In this thesis, the authors hypothesise that the hedonic and utilitarian value of rewards have a moderating effect on the relationships between equity sensitivity, justice and reciprocity perception, as well as relationships between reciprocity perception and commitment. The rationale for hypothesising the moderation effect of values is drawn from the prior literature, which postulated that the degree of satisfaction with social exchange relations depends on whether exchange brings hedonic or utilitarian benefits (Mano and Oliver, 1993, Ha and Park, 2013). The significance and strength of the effects of hedonic and utilitarian values on the evaluation of social relations varied depending on user groups, the resources being exchanged and the aspects of relations under consideration (Mano and Oliver, 1993, Ha and Park, 2013). The assumption that hedonic reward moderates the effect of equity sensitivity derives from studies confirming that benevolent people are more affected by hedonic values and intrinsic rewards, in contrast to entitleds, who value the extrinsic nature of outcomes (Miles et al., 1994, Foote and Harmon, 2006). The intrinsic and hedonic nature of rewards are difficult to quantify, and this is likely to entail negative emotions, caused by nonreciprocal relations (Elmadağ and Ellinger, 2018), unless an individual is tolerant of inequitable reward distribution. The moderating effect of hedonic and utilitarian value on the relationship between procedural and distributive justice is suggested by the research confirming that procedural justice perception is contingent on a strong perception of hedonic value of the reward, while distributive justice is underpinned by a strong perception of the reward's utility (Zapata-Phelan et al., 2009, Hoffman

and Spitzer, 1985). When it comes to the moderation of the consequences of reciprocity perception by hedonic value, a strong hedonic value of social exchange relations decreases the commitment level and the need to employ coping strategies (Jones et al., 2006). Evidence about the effect of utilitarian value on outcomes is inconsistent (Jones et al., 2006, Park and Ha, 2016). However, in line with the study by Park and Ha (2016), it can be assumed that a stronger manifestation of utilitarian value strengthens the affective response after use behaviour. In addition, the findings of the research by Jones et al. (2006) suggest that utilitarian value increases the effect on loyalty manifested through the enhanced commitment. Based on the above, the following hypotheses state that:

H9: The perceived hedonic value of an outcome a) increases the effect of equity sensitivity and procedural justice on reciprocity perception, b) decreases the effect of distributive justice on reciprocity perception, c) decreases the effect of reciprocity perception on emotion-focused and problem-focused coping, and d) decreases the effect of emotion-focused and problem-focused coping on relationship commitment.

H10: The perceived utilitarian value of an outcome a) decreases the effect of equity sensitivity and procedural justice on reciprocity perception, b) increases the effect of distributive justice on reciprocity perception, c) increases the effect of reciprocity perception on emotion-focused and problem-focused coping, and d) increases the effect of emotion-focused and problem-focused coping on relationship commitment.

Self-efficacy, response efficacy and social influence are the three constructs which are considered to be determinants of behavioural intention, especially in stressful situations (Liang and Xue, 2009, Johnston and Warkentin, 2010). Strong indicators of self-efficacy, response efficacy and social influence determine the inclination of people to engage in activity that is supposed to mitigate stress (Johnston and Warkentin, 2010). Self-efficacy refers to the belief in the personal ability to effectively undertake actions (aimed at balancing non-reciprocal outcomes). Response-efficacy refers to the belief that the actions will bring the expected results (Witte, 1992). Social influence relates to the impact that a social group has on the individual's decision to engage in behaviour (Venkatesh et al., 2003). Reciprocity evaluation in the sharing economy may be stressful, due to inconsistency between a prior expectation of reciprocal relations and the actual outcome (Walster et al., 1973, Adams, 1963, Biron and De Reuver, 2013). Hence, these

constructs are assumed to moderate the relationship between reciprocity perception, coping mechanisms and commitment. The moderation effect of the selected constructs is suggested by the findings of previous studies postulating that strong self-efficacy, response efficacy and social influence predict motivation to use coping strategies (Haney and Long, 1995, Lerner and Kennedy, 2000, Liang and Xue, 2009, Johnston and Warkentin, 2010, Floyd et al., 2000). Although self-efficacy and response efficacy are positively associated with both emotion and problem-focused coping, their stronger manifestation is more correlated with problem-focused coping (Long, 1989, Liang and Xue, 2009).

H11: a) Self-efficacy, b) response-efficacy and c) social influence increase the effect of reciprocity perception on emotion-focused and problem-focused coping, and increase the effect of both coping mechanisms on relationship commitment.

Table 7 presents evidence supporting the proposed moderation effects.

Table 7: Supportive evidence on the moderation effects

Moderator	Path	Positive effect	Negative effect
Hedonic Value	ES → RP	(Miles et al., 1994)	(Elmadağ and Ellinger, 2018)
	PJ → B	(Zapata-Phelan et al., 2009)	
	RP → CM		(Jones et al., 2006)
	CM → RC		(Jones et al., 2006)
Utilitarian Value	ES→ RP	(Elmadağ and Ellinger, 2018)	(Foote and Harmon, 2006, Miles et al., 1994)
	DJ → B	(Hoffman and Spitzer, 1985)	
	RP → CM	(Park and Ha, 2016)	(Jones et al., 2006)
	CM → RC	(Park and Ha, 2016)	
Self-efficacy	RP → CM	(Haney and Long, 1995, Lerner and Kennedy, 2000)	

	RP → EFC	(Long, 1989)	(Liang et al., 2019)
	RP → PFC	(Liang et al., 2019, Long, 1989)	
	EFC → RC		(Johnston and Warkentin, 2010)
	PFC → RC	(Han et al., 2016, Johnston and Warkentin, 2010, Floyd et al., 2000)	
Response efficacy	RP →EFC	(Liang and Xue, 2009)	
	RP → PFC	(Liang and Xue, 2009)	
	PFC → RC	(Floyd et al., 2000, Johnston and Warkentin, 2010)	
	EFC → RC	(Han et al., 2016)	
Social influence	SI → RC	(Liang and Xue, 2009, Johnston and Warkentin, 2010)	

Note: equity sensitivity (ES), reciprocity perception (RP), procedural justice (PJ), behaviour (B), distributive justice (DJ), self-efficacy (SE), coping mechanisms (CM), emotion-focused coping (EFC), problem-focused coping (PFC), relationship commitment (RC), response efficacy (RE), social influence (SI).

4. Methodology

4.1. Research Philosophy

A research paradigm is "a way of examining social phenomena from which particular understandings of these phenomena can be gained and explanations attempted" (Saunders, 2011). Social science paradigms represent a system of beliefs about the nature of society the research is built upon (Kelemen and Rumens, 2008). The bottom line of any research paradigm is research philosophy. This refers to the development of knowledge through the research, based on a set of assumptions. Those assumptions are related to the nature of reality and the approach by which researchers view the world. They underpin the research design and the methods that are utilised to investigate research inquiry (Crotty, 1998). The understanding of the philosophical approach that reflects the research methodology is essential for researchers as it affects the way in which they see the subject and objects of the investigation and how they deal with it. The selection of philosophical choices should be justified against other alternatives that could have been adopted. The research in social science can be conceptualised in terms of ontological, epistemological assumptions, the approaches to treating human nature and methodology (Burrell and Morgan, 2017) (Table 8).

Ontological assumptions concern the essence of the subject being investigated. Particularly, social science research builds upon the question as to whether the social reality is external to humans and outside of human consciousness, or whether it is produced by the individuals' consciousness. In other words, the ontological choices come either from an "objective" stance that considers the world to exist separate from individuals' cognition, or a "subjective" stance, considering the world to be a product of the human mind (Burrell and Morgan, 2017). Another set of assumptions closely linked to ontology is epistemology. Epistemological assumptions concern the nature of knowledge. Epistemological positions define the answers to the question as to how we understand social reality and how we transfer the knowledge aboutreality to people (Crotty, 1998, Burrell and Morgan, 2017). For example, one might wonder what types of knowledge can be generated and how they can be justified as true. For some researchers, knowledge is tangible, hard and measurable. For others, the knowledge is subjective, intangible and based on an individual's interpretation. In a nutshell, knowledge in social science can be

treated as an outcome of personal experience, as well as quantifiable facts (Burrell and Morgan, 2017). Ontological and epistemological perspectives reflect the way in which the researcher treats human beings in relation to the social reality. Different philosophical stances lead towards different roles that humans play in shaping the environment. The research may regard a human's behaviour being shaped by the external environment. On the other hand, a human can be treated as having a voluntarist role in controlling and mastering the environment around them (Guba and Lincoln, 1994). Despite the existence of the two opposing perspectives on the continuum, research often occupies a stance somewhere in the middle of it (Burrell and Morgan, 2017). The last set of assumptions refers to the methodology of research. It derives from the process of theory generation and the way in which the researcher comes to conclusions (Saunders, 2011). The methodological choices are informed by the philosophical perspectives adopted by the researcher. If the research treats the social world as an external objective reality that exists independent of the mind of human beings, the scientific inquiry will most likely revolve around the analysis of the universal relationship between variables. When the research focuses on the social world that is produced by human cognition, the scientific endeavour will probably focus on understanding and explaining unique and complex things (Burrell and Morgan, 2017).

There are two main paradigms that guide research in social science: (a) interpretivism and (b) positivism. Interpretivism is based on the ontology of constructionism. Constructionism assumes that "*all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context*" (Crotty, 1998). This means that individuals construct the social phenomenon and the meaning attached to it through social interactions. The process is dynamic, hence the social world is constantly changing. The social reality is subject to a specific interpretation of the researcher, which implies that social entities, including social organisations, culture and relations, are not definitive (Chowdhury, 2014). For example, according to the constructionist vantage point, culture is not regarded as a predetermined phenomenon that exists in external reality; rather it emerges as a result of the social processes – i.e. constant constructions and reconstructions. Culture, like any other social entity, adapts to the needs of individuals and situations (Becker, 1982). However, the constructionist position should not be pushed to the extreme (Crotty, 1998). Some scholars who adopt a constructionist approach recognise that although the objects are meaningless without

human beings, they are reference points and partners that help individuals generate that meaning (Becker, 1982, Strauss et al., 1973). From the epistemological point of view, interpretivism appreciates the difference between subjects and objects of the social world and thus requires the researcher to transcribe and translate the subjective meaning of social phenomenon under investigation (Schwandt, 1994, Guba and Lincoln, 1994). According to Thomas Schwandt (1994, p. 125), "*interpretivism was conceived in reaction to the effort to develop natural science of the social. Its foil was largely logical empiricist methodology and the bid to apply that framework to human inquiry*". Positivism is based on the ontology of objectivism, which implies that social reality is beyond the reach of human beings. In contrast to interpretivism, positivism is based on the assumption that the social world is independent of humans' cognitions, it is external and exists "out there". People do not have the influence to construct or alter social reality. Therefore, it is hard and concrete and should be studied using laws similar to natural science. The role of individuals is determined by the environment they are in (Burrell and Morgan, 2017, Crotty, 1998).

This thesis adopts the ontological position of objectivism. That means that consumer behaviour in the sharing economy is a phenomenon that is static, external and not constructed by the researcher. When examining sharing economy users' motives, this thesis follows the assumption that humans' values, expectations, norms and beliefs are not socially-constructed, but rather predetermined and beyond the influence of the researcher. Epistemologically, this thesis adopts the position of positivism. That means that the research aims to explain the social reality by adopting "universal laws", whereby the role of the researcher is to observe and draw conclusions objectively, without attaching a subjective meaning to social events.

Table 8: Core assumptions in social science research

Approach	The subjectivist approach to social science	The objectivist approach to social science
Theoretical Perspective	**Interpretivism**	**Positivism**
Ontology	Socially constructed May change	External Objective

	Subjective Multiple	Independent of social actors
Epistemology	Subjective meanings Focus on the details in situations Subject of interpretation	Data derived from observable events Research based on facts Focus on causality Focus on generalisation Phenomenon can be reduced to simpler elements
Human Nature	Voluntarism External environment is produced by human beings	Determinism No human role in sharing the environment
Methodology (research approach and design)	Ideographic Small samples In-depth investigation of events (e.g. ethnography, discourse analysis, grounded theory) Inductive approach Theory generation Qualitative methods	Nomothetic Large samples Structured process of research Measurements Deductive approach Hypothesis testing Mostly quantitative methods

4.2. Research Approach

The adoption of the objectivist and positivist philosophical stances has implications for the methodological choices and procedures of this research. The methodology of the research that adopts an interpretivist perspective has an ideographic nature. The ideographic methodology assumes that the researcher gets an insight into the phenomenon by being in close contact with the subjects of the study and letting themes emerge throughout the course of the investigation (Burrell and Morgan, 2017). This types of research is inductive and often implemented using a qualitative research design (Newman et al., 1998). Qualitative research is used to understand complex phenomena by examining the meanings that social actors assign to those phenomena. The process of the research is not pre-determined, which enables flexibility in the investigation procedures and new questions to emerge. Data collection is usually conducted in the subjects' settings. As a result of data collection, the researcher generates a broad body of knowledge from

a particular research inquiry. The inductive method of data analysis makes it possible for the researcher to interpret data through a subjective understanding of the social event (Creswell and Poth, 2017).

The positivist approach encourages research based on a deductive approach and a quantitative methodology. The aim of such research is to test theories by examining theoretically-driven hypotheses of the relationships between variables. The deductive nature of the research prevents bias by eliminating personal interpretation of the findings and alternative explanations. The inference of causal relationships, based on a large sample, not only makes it possible to test hypotheses but also to make predictions. The relationships are measured and quantifiable through statistical procedures. The research procedures are structured and should be sufficiently rigorous to ensure the replicability of findings. These make it possible to generalise findings to a larger population (Creswell and Poth, 2017).

Consistent with the positivist view, this research uses a quantitative research design. The quantitative design addresses the aims of this research: a) to make observations about the role of the specific groups of factors in the behaviour of sharing economy users, b) to draw inferences about the significance of the observed variables and c) to make generalisable conclusions. Given the deductive method of knowledge generation, the thesis tests theories rather than generating them. For example, the first research model, focusing on the social and psychological antecedents and outcomes of the use of the sharing economy, was developed based on prior research and theories, such as Social Exchange Theory and the framework of social capital factors. The second research model, about the determinants of perceived reciprocity and commitment, was built on evidence drawing on the research on reciprocity in the sharing economy, Equity Theory and coping behaviours. By testing the theories, this thesis gives information about the degree to which the principles of Social Exchange Theory, Social Capital Theory and Equity Theory are successful in predicting human behaviour in the sharing economy context. In addition, the findings of the thesis have an explanatory and predictive nature, as the data is generated deductively from a large sample of the population. The quantitative analysis of data makes it possible to make inferences about the likely behaviour of sharing economy users in similar circumstances. This research is among the majority of other scientific work in the domain of the

sharing economy, which has quantitatively examined the use of platforms from the user's perspective (Kim et al., 2015, Tussyadiah and Pesonen, 2016, Hamari et al., 2015).

4.3. Research Design

Research design is a plan about how a researcher is going to answer the research question. The plan dwells on the objectives of the research, and is implemented using research methods. The research method is a set of different techniques and tools for collecting and analysing data which ensure a better understanding of the social world (De Vaus and de Vaus, 2013). The research design underpinned by the objective of the research can be exploratory, descriptive or explanatory (Kowalczyk, 2015). The aim of an exploratory study is to grasp the idea on the topic and understand a complex problem. Therefore, the flexibility of a research design is important for gaining an in-depth insight into the issue. Descriptive research is conducted with the purpose of gaining an accurate description of events, people or situations (Walter, 2006). The aim of an explanatory study is to confirm a causal relationship between variables (Bhattacherjee, 2012). Considering the purpose of this thesis is to explore the correlation of a set of variables – i.e. the antecedents of the sharing economy, use behaviour and outcomes – this research takes an explanatory stance. That means that the research aims to examine more than one variable, thus descriptive statistics are not applicable. Although descriptive research may claim that some of the variables co-vary, to model the effect of variables in such research is not legitimate (Mitchell and Jolley, 2012). The exploratory design is not applicable either, because the goal of exploratory research is to generate theory/hypotheses through an in-depth analysis of the phenomenon, rather than to test it (Kothari, 2004).

Having identified philosophical positions and the purpose of the study, the researcher needs to determine the research design and strategies associated with it. The three main categories of research design are qualitative, quantitative and mixed-method (Bernard and Bernard, 2013, Neuman, 2014, Morgan, 2007) (Table 9). Quantitative research is used to examine the relationship between variables through statistical techniques. It is associated with experimental, cross-sectional and longitudinal research strategies, such as surveys, diary studies and structured observations (Bhattacherjee, 2012). The above research strategies make it possible to investigate

relationships between two or more variables. However, in experimental research an independent variable can be manipulated (Kothari, 2004).

A qualitative research design is associated with the interpretivist philosophy, as the phenomenon under investigation is perceived to be complex and socially constructed (Denzin and Lincoln, 2005). From the constructivist point of view, a human being interprets the world subjectively. Therefore, the researcher needs to employ open-ended questions to draw the meaning from individuals' views. In addition, the understanding of social reality is contingent on the context and culture. Hence, the data should be collected personally within the social premises and data should be interpreted from the perspective of the researcher's background and experiences. The research is conducted through strategie such as case studies, narratives, phenomenologies, ethnographies, focus groups and grounded theories (Schwandt, 1994).

A mixed-method research design incorporates both quantitative and qualitative elements in the design. The mixed-method is associated with pragmatism (Creswell and Clark, 2017, Johnson and Onwuegbuzie, 2004). The knowledge claim arises from satiation and the selection of the research method comes as a solution to a research problem (Patton, 1990). The research is not guided by any system of reality or philosophy. The researcher has the freedom to select the methods, techniques and procedures that best apply to the solution of the research problem. However, before mixing the methods, the researchers need to justify the selection of the combination of methods (Cherryholmes, 1992). The combination of qualitative and quantitative methods can be in a variety of ways. First, it can be at the stage/stages of research implementation, such as data collection, analysis or interpretation. Second, mixing can be in terms of timing within research processes. For example, the researcher may use different methods in a single phase (concurrently) or multiple phases (sequentially) of data collection. The implementation of different methods can be the emerging need that is used to complement/enrich existing findings. Alternatively, it can be guided by the ideology of the research, whereby irrespective of the domain of the study, the ultimate goal is to advocate for transformation (Creswell et al., 2003). Third, the degree of qualitative versus quantitative elements within a research design may vary (i.e. they can be equal or skewed towards either the qualitative or quantitative approach) (Nastasi et al., 2010).

Table 9: Research design and strategies

	Quantitative	Qualitative	Mixed Method
Strategies	Experiments Surveys	Narratives Phenomenology Grounded theory Case studies Ethnographies Action research Focus Groups	Sequential Concurrent Transformative
Procedures	Predetermined Instrument based Performance data Observation data Attitude data and census data Statistical analysis	Emerging methods Open-ended questions Observation data Interview data Audiovisual data / document data Text and image analysis	Both predetermined and emerging Both open- and closed-ended questions Multiple forms of data Statistical and text analysis

Based on the above, this research employs a quantitative research design and cross-sectional strategy. This selection is explained on the basis that the purpose of the research is to infer the effect of social and psychological factors on use behaviour and use outcomes at a single point in time.

4.4. Data Collection

4.4.1. Survey Approach

This research employs a survey research method of data collection. Surveys are mostly associated with the deductive approach of generating knowledge and positivist research philosophy (De Vaus and de Vaus, 2013). In contrast to experiments that are conducted to investigate why people behave and think in a certain way, the survey is the optimal method to identify what people think, feel or do (Mitchell and Jolley, 2012). The survey makes it possible to employ inferential

statistics to suggest possible reasons as to how the variables under investigation correlate. It is one of the most convenient and inexpensive ways to gather data about individuals' beliefs, attitudes and behaviour (Mitchell and Jolley, 2012) using primary data (Ghauri and Grønhaug, 2010). In the context of this thesis, the survey enabled us to identify the effect of a certain group of factors on the behaviour of sharing economy users and the outcomes resulting from it.

According to Mitchell and Jolley (2012), there are three main objectives that each study adopting a survey approach should meet. First, the study should be theoretically driven and the hypotheses should be clearly identified. The deduction of hypotheses is the result of a rigorous examination of the previous literature, which helps identify the focus of the research. Secondly, data collection technique should be developed in such a way as to ensure the validity of the measurements of the variables. Therefore, the utilisation of a proper data collection instrument and validated scales are of paramount importance. Thirdly, the survey results should be generalisable. To meet this objective, the researcher needs to recruit the target population.

There are two main types of surveys that can be employed to measure individuals' attitudes, opinions and behaviours: structured interviews or self-administered questionnaires. They can be conducted either face-to-face or by employing communication channels, such as telephones, post or emails (Mitchell and Jolley, 2012, Blackmon and Maylor, 2005). Structured interviews enable a standardised approach to collecting data across the sample. The answers are fixed and closed-ended. The advantages of this data collection instrument are the reduction of the error rate and the accuracy of the results due to standardised questions and answers (Mitchell and Jolley, 2012). Self-completion questionnaires are administered by the respondents themselves. Compared to structured interviews, the advantage of this instrument is that it is quicker and cheaper to administer, there is a higher degree of standardisation (i.e. the sequence of questions is maintained), and there is no social desirability bias, which refers to the variance of answers depending on the interviewees' perception of the social desirability of the answers (De Leeuw, 1992). Self-completion questionnaires can be conducted in three ways: 1) they can be delivered and collected from a certain location, 2) they can be distributed through online communication channels (e.g. web, email), 3) the can be distributed by post (Blackmon and Maylor, 2005).

For the purpose of this thesis, the authors utilise web-based self-administered questionnaires for both surveys. This data collection tool was considered to be appropriate for data collection, given

that the research examines the antecedents and outcomes of collaborations on online sharing economy platforms. In addition, the use of this data collection tool increased the efficiency of data collection and minimised administration costs. The web-based approach enables higher sample dispersion in terms of geography. The respondents had to access the survey pages through URLs and complete questionnaires following guidelines on the first page of the surveys.

4.4.2. Questionnaire design

The design of the data collection instrument is one of the primary factors ensuring the reliability of the study. Therefore, the possible disadvantages of the self-completion questionnaire, such as a lower response rate due to lower control over the procedure and the risk of missing data, should be eliminated (Mitchell and Jolley, 2012). To eliminate the first risk, participation in both questionnaires was stimulated by incentives, which has been shown to be effective in increasing the quality and rate of responses (Church, 1993). The questionnaires were deployed on a web-based platform and were distributed to consumer panels (i.e. sharing economy users) located in the USA with the help of a crowd-sourcing platform provider. A monetary incentive was offered for each completed questionnaire. To eliminate the second risk, all responses in the questionnaires were forced, which means that submission of the questionnaire would not have been possible if any question was left unanswered.

The questionnaires consisted of three sections. The first section included the introductory information with the purpose 1) to inform participants about the aim of the survey and 2) warn them that by proceeding to the survey questions, the respondents were giving consent to participate in the research. Groves (2004) recommended that to increase the survey response rate, the researcher should not oblige respondents to sign a consent form. Therefore, the introductory text gave the opportunity for respondents to make an informed decision about the participation in the research project without, though, providing a written signature. Both questionnaires for this thesis were designed in such a way as to preserve the anonymity of the participants. The second part of the questionnaires included questions aimed at collecting demographic characteristics and to measure control variables (Table 10). The third part of the questionnaires consisted of questions that were aimed at measuring the main constructs. All questions were closed-ended. The purpose of employing closed-ended questions was three-fold. First, the application of closed-ended scales adopted from the literature increases the reliability and validity of the results.

Second, the administration of closed-ended questions is easier for respondents, which increases the response rate. Third, the application of closed-ended questions increases the accuracy of the measurements (Zhou et al., 2017).

Table 10: Measurements: demographic variables

Variable	Answer Options
Gender	1) Male 2) Female
Age	1) under 20 2) 20 - 29 3) 30 - 39 4) 40 -49 5) 50 - 59 6) Over 60
Employment Status	1) Full time employed 2) Part time employed 3) Out of work (but looking for) 4) Out of work (but not looking for) 5) Homemaker 6) Student 7) Retired 8) Unable to work
Ethnicity	1) Non-Hispanic White or Euro-American 2) Black, Afro-Caribbean, or African American 3) Latino or Hispanic American 4) East Asian or Asian American 5) South Asian or Indian American 6) Middle Eastern or Arab American 7) Native American or Alaskan Native 8) Mixed 9) Other
Education	1) Some high school or less 2) High school graduate or equivalent 3) Vocational/technical school (two year program) 4) Some college, but no degree 5) College graduate (four year program)

	6) Some graduate school, but no degree. 7) Graduate degree (MSc, MBA, PhD, etc.) 8) Professional degree (M.D., J.D., etc.)
Area of residence	1) Urbanized Area (50,000 or more people) 2) Urban Cluster (at least 2,500 and less than 50,000 people) 3) Rural (all other areas)
Income	1) $0 - $24,999 2) $25,000 - $49,999 3) $50,000 - $74,999 4) $75,000 - $99,999 5) More than $100,000
Marital Status	1) Single (never married) 2) Married 3) Separated 4) Widowed 5) Divorced
Use Frequency	The frequency of engagement with carsharing services (e.g. Lyft, Uber, Zipcar, Car2Go), apartment sharing services (e.g. Airbnb, Couchsurfing), product-service communities (e.g. Peerby, Taskrabbit), retail platforms (e.g. Bag Borrow and Steal), peer-to-peer lending platforms (e.g. Crowdfunder, Lend Club) and coworking spaces (e.g. We Work) was measured with a 7-point Likert scale: 1) never 2) Tried, but do not use them now 3) Once a year 4) Once a month 5) 2 – 3 times a month 6) Once a week 7) A few times a week
Use Intensity	The intensity of engagement with carsharing services (e.g. Lyft, Uber, Zipcar, Car2Go), apartment sharing services (e.g. Airbnb, Couchsurfing), product-service communities (e.g. Peerby, Taskrabbit), retail platforms (e.g. Bag Borrow and Steal), peer-to-peer lending platforms (e.g. Crowdfunder, Lend Club) and coworking spaces (e.g. We Work) was measured with a 7-point Likert scale: 1) Non-use

	2) Almost never use 3) Use but not intensively 4) Neutral 5) Slightly intensive 6) Intensive 7) Extremely intensive
The frequency of the use of platforms	This scale was used to measure the frequency of the use of the following monetary and nonmonetary platforms based on a 9-point Likert scale with anchors "1=never" to "9=every day" Monetary platforms: 1) Monetary-based accommodation sharing (e.g. Airbnb, HomeAway) 2) Monetary-based access to clothing, accessories and toys (e.g. Rent the Runway, DesignerShare, BabyQuip) 3) Monetary-based transportation (e.g. Uber, Lyft, Gett, Zimride) 4) Monetary-based childcare, petcare, babysitting and caregiving (e.g. Care.com, UrbanSitter, Bubble, DogVacay, Rover) 5) Monetary-based access to everyday items, equipment and household goods (e.g. Fat Llama, GoShare, Dolly, Zilok) 6) Monetary-based rent of space (e.g. Just Park, Peerspace) 7) Monetary-based knowledge and talent sharing (e.g. TaskRabbit, Zaarly, Upwork) 8) Finance (e.g. CrowdCube. Kickstarter, Sofi, Lending Club) 9) Monetary-based experience sharing (e.g. Vayable, EatWith) 10) Monetary-based book exchange (e.g. PaperBack Swap) Nonmonetary platforms: 1) Nonmonetary-based accommodation (e.g. Couchsurfing, GuesttoGuest, HomeExchange) 2) Nonmonetary-based access to clothing, baby equipment and accessories (e.g. Outdress) 3) Nonmonetary-based access to everyday items and household goods (e.g. Freecycle, Freegle) 4) Gifts exchange (e.g. GiftFlow, Ziilch, Exchango, Freelly)

	5) Nonmonetary-based rent of space (e.g. Shared Earth, YardShare) 6) Nonmonetary-based knowledge and talent sharing (e.g. TimeBank, free skills provision through StreetBank) 7) Nonmonetary-based book exchange (e.g. BookMooch, BookCrossing)

There are four main types of variables: a) nominal, in which different labels are assigned to different types of responses, b) ordinal, in which responses are ranked, c) interval, in which response scales are ranked and the distance between each response category is equal, and d) ratio, which are similar to interval variables, but the minimum value can be equal to zero (Hair, 2014). This research included nominal (demographic characteristics, such as age, gender and income) and interval variables measuring the main constructs referring to attitudes, behaviour and perceptions.

All constructs were measured with Likert-type scale items: (1) strongly disagree, (2) disagree, (3) slightly disagree, (4) neither agree nor disagree, (5) slightly agree, (6) agree, and (7) strongly agree. The utilisation of a Likert-type scale is very useful in questionnaires in two ways. First, this makes it possible to collect data that more accurately represent individuals' attitudes, beliefs and behaviour. Second, Likert-type questions give the opportunity to employ more powerful statistical tools for analysing the data (Mitchell and Jolley, 2012).

To ensure the validity and reliability of the questionnaire, pilot testing was conducted (Boudreau et al., 2001). The purpose of the pilot test is to check some aspects of the questionnaire to ensure that no difficulties will occur later (Alreck and Settle, 1994). The use of the pilot test made it possible to evaluate the feasibility of the study in terms of the time and effort taken to fill in the questionnaire, the understanding of the questions, the clarity of the wording, the design convenience, as well as the scales' applicability. The questionnaire was distributed to eleven students of Newcastle University, using sharing economy platforms. Based on the comments from the pilot study, some questions were clarified. No reliability and validity concerns were raised. Therefore, the measurement constructs and items were not changed.

4.5. Measurements

The questionnaire for the first survey employed 11 multi-item reflective scales to measure the relationships between main constructs (Table 11). Structural social capital was represented by bonding social ties. The items for this construct were adapted from the study by Chiu et al. (2006). The items for the cognitive social capital, represented by the shared vision, originated from the studies by Tsai and Ghoshal (1998) and Leana and Pil (2006). The items for the relational social capital were associated with three constructs, which are identification (Chiu et al., 2006), the reciprocity norm (Wasko and Faraj, 2005, Morales, 2005, Suh and Shin, 2010) and pro-environmental beliefs (Snelgar, 2006). Pro-environmental beliefs is a three-dimensional construct reflecting altruistic, biospheric and egoistic beliefs (Snelgar, 2006). To assess the social value, the scale by Rintamäki et al. (2006) was used. The use behaviour measure was adapted from the previous literature examining the behaviour of users in the context of IS systems (Ajzen and Fishbein, 1980, Taylor and Todd, 1995, Riemenschneider et al., 2003, Venkatesh et al., 2012). When it comes to the outcomes of the behaviour, this study adapted the social inclusion scale from Richardson and Le Grand (Richardson and Le Grand, 2002), while the subjective well-being measure was adapted from Diener *et al.* (Diener et al., 2010). All items were measures using a 7-point Likert scale ranging from "1 - strongly disagree" to "7 – strongly agree". In regards to the moderators, the study assessed the effect of respondents' socio-demographic characteristics, such as age and income.

Table 11: Measurement items for survey 1

Measurement Item	Loading	Cron-bach's α
Bonding Social Ties (Chiu et al., 2006)		0.969
Apart from transactions, I have frequent communication with some users	0.943	
I know some users on a personal level	0.926	
I spend a lot of time engaging in social interactions with some users	0.953	
I maintain close social relationships with some users	0.946	
Shared Vision (Tsai and Ghoshal, 1998, Leana and Pil,		0.959

2006)		
All users are in total agreement with the vision of the platforms	0.86	
Users view themselves as partners in charting the direction of the platforms	0.915	
Users are committed to the goals of the platforms	0.936	
Users have the same purpose of using the platforms	0.893	
I am enthusiastic about pursuing the collective goals and missions of platforms	0.884	
I share the same ambitions and vision with other users	0.877	
Identification (Chiu et al., 2006)		0.960
I am proud to be the member of communities	0.916	
Users behave in a consistent manner	0.842	
I have a strong positive feeling toward communities	0.937	
I have the feeling of togetherness or closeness in communities	0.931	
I feel a sense of belonging toward communities	0.932	
Altruistic Belief (Snelgar, 2006)		0.902
Environmental protection benefits everyone	0.917	
Environmental protection will help people have a better quality of life	0.91	
The effects of pollution on public health are worse than we realise	0.745	
Pollution generated here harms people all over the earth	0.783	
Biospheric Belief (Snelgar, 2006)		0.835
Over the next several decades, thousands of species of plants and animals will become extinct	0.848	
Modern development threatens wildlife	0.847	
Egoistic Belief (Snelgar, 2006)		0.859
Laws to protect the environment limit my choices and personal freedom	0.795	
Protecting the environment will threaten jobs for people like me	0.949	
Reciprocity (Wasko and Faraj, 2005, Morales, 2005, Suh and Shin, 2010)		0.945
I believe that the benefits I give to other users will be reciprocated	0.907	

It is fair to help other users when they want help with the service/product-related inquiry	0.902	
I trust that some users would help me if I were in a similar situation	0.907	
I know that other users will help me, so it is only fair to help users of platforms	0.89	
Social Value (Rintamäki et al., 2006)		0.946
I find products/services that are consistent with my style	0.866	
I feel that I belong to the user segment of platforms	0.892	
I am eager to tell my friends/acquaintances about platforms	0.863	
Patronising platforms creates an image that I want to help others	0.773	
I feel like a smart user, because I make successful acquisition/distribution of products/services on platforms	0.886	
It gives me something that is personally important or pleasing	0.9	
Use Behaviour (Ajzen and Fishbein, 1980, Taylor and Todd, 1995, Venkatesh et al., 2012, Riemenschneider et al., 2003)		0.891
I would have no difficulty telling others about the results of using platforms	0.705	
I believe I could communicate to others the consequence of using platforms	0.891	
The results of using platforms are apparent to me	0.915	
I would have no difficulty explaining why platforms may or may not be beneficial	0.767	
Social Inclusion (Richardson and Le Grand, 2002)		0.945
I have enough money for food	0.786	
I have access to childcare and general care facilities	0.581	
I am able to obtain credit	0.785	
I have access to public services	0.785	
I have access to health care	0.792	
I can get medical help immediately if required	0.784	
I am able to afford transport costs	0.831	
I have access to community facilities	0.736	
I am economically active	0.75	
I have access to financial services	0.841	
I have access to educational opportunities	0.783	

I have access to transportation	0.807	
Well-Being (Diener et al., 2010)		0.965
The engagement with sharing economy platforms makes it possible to... *- Lead a purposeful and meaningful life*	0.855	
- Have supportive and rewarding social relations	0.882	
- Make my daily activities engaging and interesting	0.891	
- Contribute to the happiness and well-being of others	0.884	
- Be competent and capable in the activities that are important to me	0.901	
- Be a good person and live a good life	0.905	
- Be optimistic about my future	0.879	
- Be respected by other people	0.855	

For Survey 2, multi-item reflective scales were adopted from prior literature to measure the eleven constructs of the main model (Table 12). To measure social identity, the scale developed by Luhtanen and Crocker (1992) was adapted. Outgroup and ingroup comparison were measured by the scales derived from the study by Hess et al. (2010), while procedural and distributive justice were measured by the scales adapted from the study by Colquitt (2001), Leventhal (1980). Predisposition towards maximisation scale was adapted from the studies by Lai (2010), Schwartz et al. (2002), Highhouse et al. (2008), Equity sensitivity scale was adapted from the studies by Huseman et al. (1987), King Jr et al. (1993). Reciprocity perception was measured by the scale developed by Bakker et al. (2000). Emotion-focused and problem-focused coping were measured by the scale developed by Billings and Moos (1981). Finally, the items for measuring relationship commitment derived from the study by Anderson and Weitz (1992). All items, except the equity sensitivity scale, were measured using a Likert scale with anchors between "1 – strongly disagree" to 7 – strongly agree". Equity sensitivity was measured by a 10-point scale, where "1" characterised entitlement and "10" characterised benevolence. To measure the moderating effect of hedonic and utilitarian values, we used the scale developed by Babin et al. (1994). The factors moderating the relationship between reciprocity perception, coping strategies and relationship commitment included self-efficacy, response efficacy and social influence constructs. Self-efficacy and response efficacy were adopted from the study by Warkentin and Siponen (2015),

while social influence originated from the study by Venkatesh et al. (2012). Moderators were measured by a 7-point Likert scale.

Table 12: Measurement items for survey 2

Measurement Item	Loa-ding	Cron-bach's α
Social Identity (Luhtanen and Crocker, 1992)		0.953
Overall, my membership in sharing economy platforms and the associated communities reflect the way I feel about myself	0.869	
The sharing economy platforms and the associated communities I belong to have been an important reflection of who I am	0.930	
The sharing economy platforms and the associated communities I belong to have been important to my sense of what kind of person I am	0.949	
In general, belonging to sharing economy platforms and the associated communities is an important part of my self-image	0.915	
Outgroup Comparison (Hess et al., 2010)		0.934
The overall benefits of using sharing economy platforms are greater than the benefits one receives when using traditional providers	0.896	
Overall, using sharing economy platforms is more beneficial compared to when using traditional providers	0.928	
The overall impact of using sharing economy platforms is more favourable than when using other traditional providers	0.903	
Ingroup Comparison (Hess et al., 2010)		0.909
My overall benefits of using sharing economy platforms are greater than the benefits experienced by other users	0.891	
Overall, sharing economy platforms have been more beneficial to me compared to other users	0.936	
Procedural Justice (Colquitt, 2001, Leventhal, 1980)		0.913
The procedures of engaging in transactions are free of bias	0.886	
The procedures of engaging in transactions are based on accurate information	0.889	
Users are able to appeal the outcomes of procedures when	0.868	

engaging in transactions		
Distributive Justice (Colquitt, 2001, Leventhal, 1976)		0.903
The outcomes are appropriate for what users undertake to complete a transaction	0.907	
The outcomes reflect what users have contributed into the transactions, in terms of money, effort or time spent	0.907	
Predisposition towards maximisation (Lai, 2010, Schwartz et al., 2002, Highhouse et al., 2008)		0.894
Whenever I'm faced with a choice, I try to imagine what all the other possibilities are, even ones that aren't present at the moment.	0.861	
My decisions are well thought through	0.868	
I am uncomfortable making decisions before I know all my options.	0.699	
Before making a choice, I consider many alternatives thoroughly	0.874	
Equity Sensitivity (Huseman et al., 1987, King Jr et al., 1993)		0.855
When having exchange relationships with people it is important ... *(1) to receive ....(10) to give*	0.659	
(1) I am concerned with what I receive ....(10) I am concerned with what I contribute	0.689	
(1) I watch out for my own good ....(10) I help others	0.788	
(1) my hard work should benefit me ....(10) my hard work should benefit others	0.737	
(1) to look out for myself ....(10) to give than to receive	0.816	
Reciprocity Perception (Bakker et al., 2000)		0.928
How often do you feel you invest more in the relationship with other parties of sharing economy transactions than you receive in return?	0.894	
How often do you feel you lay out yourself too much in view of what you achieve?	0.913	
How often do you feel you give sharing economy platforms and associated communities a lot of time and attention, but meet with little appreciation?	0.895	
Emotion-focused coping (Billings and Moos, 1981)		0.712
I prepare for the worst	0.736	
Sometimes, I take it out on other people when I feel angry or	0.751	

depressed		
Problem-focused coping (Billings and Moos, 1981)		0.874
I talk about the situation with other people who have been using sharing economy platforms	0.825	
I talk with a spouse or other relative about the problem	0.808	
I talk with a friend about the situation	0.875	
Relationship Commitment (Anderson and Weitz, 1992)		0.960
I have a strong sense of loyalty to sharing economy platforms and associated communities	0.844	
I am very committed to sharing economy platforms and associated communities	0.898	
I am quite willing to make long-term investments in using sharing economy platforms	0.930	
My relationship with sharing economy platforms and associated communities is a long-term alliance	0.933	
I am patient with sharing economy platforms and associated communities when they make mistakes that cause me trouble	0.874	
I am willing to dedicate whatever people and resources it takes to make sharing economy platforms and associated communities to prosper	0.897	

4.6. Sampling

Sampling is an important procedure in the research design, as it ensures the quality of the data. Sampling is a technique that is employed to select the units of the population who will help answer the research question. It is used when it is not feasible to collect data from the entire population. Prior to conducting this research, the two available categories of sampling methods were considered: probability (representative) and non-probability sampling (Bradley, 1999, Uprichard, 2013). Probability sampling is often associated with survey or experiment-based research. The employment of any probability sampling technique ensures that the sample selected for the research is representative of the population. This means that the probability of being selected for the study is equal for all respondents (Saunders, 2011). The four common probability sampling techniques are simple random sampling, systematic sampling, stratified random sampling and multi-stage cluster sampling (Trochim and Donnelly, 2008). The most popular

probability sampling technique employed in research is simple random sampling. This technique implies that respondents are selected randomly from the population, whereby the odds of being selected are equal for all units of the population (Bryman, 2011). Systematic random sampling is the random selection of participants not from the population, but a sampling frame (units of the population from which the sample derives), which can be justified theoretically or by the purpose of the study. For stratified random sampling, the researcher divides the population into groups (strata reflecting the population in terms of its proportionate dispersion of characteristics), from which the final sample is randomly and proportionately selected (Hibberts et al., 2012). Cluster sampling is a multi-stage process. At the first stage, the researcher randomly selects clusters of the population and at the second stage, the researcher randomly selects a sample from each cluster (De Vaus and de Vaus, 2013).

In contrast to probability sampling, non-probability sampling implies no random selection of the units of population (Vehovar et al., 2016). It means that the sample is formed based on the judgement of the researcher or convenience. Three main non-probability methods used in social science are convenience sampling, quota sampling and snowball/network sampling (Hibberts et al., 2012). A convenience sample is selected because the sample is accessible and available for the researcher. Like stratified sampling, quota sampling implies the procedure of stratifying the population, but the selection of a sample within strata is non-random (Vehovar et al., 2016). For snowball and network sampling, the researcher recruits initial subjects of the study, who subsequently recruit further respondents from their acquaintances (Browne, 2005, Hibberts et al., 2012).

Given the characteristics of each sampling technique, non-probability sampling was utilised. The primary reason for this selection method was that the findings of the research cannot be generalisable to the entire population, but only the users of sharing economy platforms. Respondents were recruited from the pool of the suppliers and providers participating in sharing economy transactions in the US. More specifically, the collection of data was in line with the convenience sampling method, because access to the consumer panel was provided by an independent research company. The reasons for selecting convenience sampling were two-fold. First, that enabled the researchers to set the eligibility criteria. The collected data needed to be specific to answer the research questions set by the thesis, which revolved around the usage of

sharing economy platforms. Hence, the questionnaires included screening questions that were aimed at filtering out the non-users of sharing economy platforms. Second, the use of a consumer panel made it possible to keep a high response rate. Respondents could access the online survey through a URL, which ensured the anonymity of the responses. The final sample for the first survey consisted of 487 respondents (Table 13). The respondents represented the users of the six main types of sharing economy services, such as carsharing, apartment sharing, product-service exchange, retail, peer-to-peer lending and coworking. The final sample for the second survey comprised 398 users of sharing economy platforms (Table 14). The sample consisted of the users of monetary and non-monetary platforms (e.g. accommodation, care services, clothes sharing, space renting, experience sharing etc), categorised by the degree to which the exchange relations imply monetary rewards. The size of the samples was optimal for running inferential analysis and identifying the strength of the inter-correlation between the variables (Hair et al., 2006).

Table 13: Demographic profile of respondents for survey 1

Demographic Characteristic	Type	Frequency (n=487)	Percentage
Gender	Male	237	48.7
	Female	250	51.3
Age	under 20	2	0.4
	20 - 29	63	12.9
	30 - 39	108	22.2
	40 -49	74	15.2
	50 - 59	114	23.4
	Over 60	126	25.9
Current Employment Status	Full time employed	280	57.5
	Part time employed	59	12.1
	Out of work (but looking for)	12	2.5
	Out of work (but not looking for)	3	0.6
	Homemaker	37	7.6
	Student	4	0.8
	Retired	80	16.4

	Unable to work	12	2.5
Ethnicity	Non-Hispanic White or Euro-American	368	75.6
	Black, Afro-Caribbean, or African American	44	9.0
	Latino or Hispanic American	41	8.4
	East Asian or Asian American	15	3.1
	South Asian or Indian American	12	2.5
	Native American or Alaskan Native	6	1.2
	Other	1	0.2
Education	Some high school or less	4	0.8
	High school graduate or equivalent	78	16.0
	Vocational/technical school (two year program)	27	5.5
	Some college, but no degree	89	18.3
	College graduate (four year program)	167	34.3
	Some graduate school, but no degree	13	2.7
	Graduate degree (MSc, MBA, PhD, etc.)	87	17.9
	Professional degree (M.D., J.D., etc.)	22	4.5
Area of Residence	Urbanized Area (50,000 or more people)	227	46.6
	Urban Cluster (at least 2,500 and less than 50,000 people)	155	31.8
	Rural (all other areas)	105	21.6
Household Income	$0 - $24,999	53	10.9
	$25,000 - $49,999	102	20.9
	$50,000 - $74,999	127	26.1
	$75,000 - $99,999	83	17.0
	More than $100,000	122	25.1
Use of Sharing Economy Platforms	Carsharing services	400	82.1

	Apartment sharing	183	37.6
	product-service exchange communities	64	13.1
	Retail platforms	77	15.8
	Peer-to-peer lending platforms	116	23.8
	Coworking spaces	58	11.9

Table 14: Demographic profile of respondents for survey 2

Demographic Characteristic	Type	Frequency (n=398)	Percentage
Gender	Male	189	47.5
	Female	208	52.3
	Prefer not to say	1	0.3
Age	under 20	9	2.3
	20 – 29	43	10.8
	30 – 39	88	22.1
	40 -49	84	21.1
	50 – 59	83	20.9
	Over 60	91	22.9
Current Employment Status	Full time employed	211	53.0
	Part time employed	32	8.0
	Out of work (but looking for)	16	4.0
	Out of work (but not looking for)	2	0.5
	Homemaker	26	6.5
	Student	9	2.3
	Retired	87	21.9
	Unable to work	15	3.8
Ethnicity	Non-Hispanic White or Euro-American	293	73.6

	Black, Afro-Caribbean, or African American	25	6.3
	Latino or Hispanic American	16	4.0
	East Asian or Asian American	38	9.5
	South Asian or Indian American	7	1.8
	Middle Eastern or Arab American	4	1.0
	Native American or Alaskan Native	3	0.8
	Other	7	1.8
	Mixed	5	1.3
Education	Some high school or less	7	1.8
	High school graduate or equivalent	45	11.3
	Vocational/technical school (two-year program)	23	5.8
	Some college, but no degree	68	17.1
	College graduate (four-year program)	113	28.4
	Some graduate school, but no degree	16	4.0
	Graduate degree (MSc, MBA, PhD, etc.)	89	22.4
	Professional degree (M.D., J.D., etc.)	37	9.3
Area of Residence	Urbanised Area (50,000 or more people)	198	49.7
	Urban Cluster (at least 2,500 and less than 50,000 people)	146	36.7
	Rural (all other areas)	54	13.6
Household Income	$0 - $24,999	55	13.8
	$25,000 - $49,999	68	17.1
	$50,000 - $74,999	82	20.6

	$75,000 - $99,999	72	18.1
	More than $100,000	121	30.4

4.7. Data Analysis

4.7.1. Test of the Measurement and Structural Models

The data collected from both surveys and hypotheses were tested using SPSS v.24 and SPSS Amos v.24. Structural equation modelling (SEM) was used for the main analysis of the data. Structural equation modelling makes it possible to empirically examine theoretical models by testing both a measurement model and a structural model in one analysis. In line with procedures suggested by (Hair et al., 2006), prior to the analysis of structural paths, confirmatory factor analysis (CFA) was conducted to test the measurement model and ensure the reliability and validity of the constructs. CFA makes it possible to test how well the measured items represent the constructs in the research models. Although there are two procedures available for a researcher to test the quality of measurements, namely exploratory factor analysis (EFA) and confirmatory factor analysis, the latter was used due the research design underpinning this thesis. Given that the purpose of the thesis is to test a theory, the validated measures were used to represent constructs. CFA uses a statistical technique, whereby a researcher assigns the factors to constructs based on the theory and tests the degree to which the constructs hold true (i.e. confirmed) in the context of the study (Albright and Park, 2009). In other words, CFA provides a test confirming "*how measured variables logically and systematically represent constructs involved in the theoretical model"* (p. 603) (Hair et al., 2006). EFA is philosophically different in that factors are not pre-assigned according to an underpinning theory, but are derived from the statistical results. That means that the software is run to identify the underlying patterns of the data and the factor structure. That is why EFA is applicable in theory-building research, whereby the researcher lets new findings emerge from the data (Brown, 2015).

After specifying the model, model fit indices were examined to see the degree to which the research model and the observed data on the variables matched. CFA provides many goodness-

of-fit values showing absolute fit (e.g. GFI, RMSEA, RMR), incremental fit (e.g. NFI, NNFI, CFI) and parsimony fit (e.g. AGFI, PNFI) indices, in addition to the X^2 results. Following the rule of thumb suggested by (Hair et al., 2006), the X^2 results, one absolute fit index (i.e. RMSEA) and one incremental fit index (CFI) were used to confirm the fit of the measurement model. As far as the cut-off values are concerned, the guidelines by (Hair et al., 2014) were adopted (Table 15).

Table 15: Goodness-of-fit statistics

Sample size	**>250**		
Number of observed variables	**<12**	**between 12 and 30**	**>30**
X^2	Insignificant p-values even with good fit	Significant p-values expected	Significant p-values expected
CFI	.95 or better	Above .92	Above .90
RMSEA	Values < .07 with CFI of .97 or higher	Values < .07 with CFI of .92 or higher	Values < .07 with CFI of .90 or higher

4.7.2. Validity and Reliability Test

CFA using AMOS produces estimates enabling the researcher to assess construct validity, which is important prior to embarking on the path analysis. Construct validity is tested to define the quality and accuracy of the research by confirming that the items are actually measuring the constructs they are designed to measure. There are several coefficients that show the convergent and discriminant validity of the measured construct (Table 16) (Hair et al., 2006). Convergent validity implies that items of a latent construct do converge and share a sufficient proportion of variance (Myers et al.). Convergent validity is estimated by factor loading, average variance extracted and reliability indices. The loading on the factor is measured by standardised coefficients, ideally, not less than .7, which would mean that the factor explains around half of the variance in the item, although .5 factor loading is also acceptable (Hair et al., 2006). Average

variance extracted (AVE) is calculated for each factor loading on a construct by dividing the total standardised factor loadings by the number of items (Fornell and Larcker, 1981). AVE should be not less than .5 to confirm the validity of the construct (Hair et al., 2006). Convergent validity is also estimated by the composite reliability coefficient, which indicates the internal consistency within the scale (Bacon et al., 1995). Composite reliability "*is computed from the squared sum of factor loadings (L_i) for each construct and the sum of the error variance terms for a construct (e_i)* (p.619) (Hair et al., 2006). Another reliability test which is often used in studies is Cronbach's alpha. This test shows how closely a set of items are related to each other (Cronbach, 1951). Either of the above reliability estimates should beequal or above .7 to confirm that the items consistently measure the same construct (Hair et al., 2006). Finally, discriminant validity demonstrates the extent to which the construct is different from others (Anderson and Gerbing, 1988, Bagozzi and Phillips, 1982). To confirm discriminant validity, the variance-extracted estimates of the constructs should be greater than the squared correlation estimate between the constructs (Hair et al., 2006).

Table 16: Reliability and validity coefficients

Convergent validity			Discriminant Validity
Factor Loading	AVE	CR / Cronbach Alpha	Discriminant Validity
> .5 acceptable >.7 ideal	>.5	>.7	AVE > R^2

4.7.3. Common Method Variance

Common method variance (CMV) has become increasingly recognised as a potential problem for behavioural research based on self-reported data collected from one source (Podsakoff et al., 2003). Common method variance suggests that the variance shared among variables is due to systematic error (Richardson et al., 2009), which threatens the validity of the conclusions. Method variance is attributable to the method rather than to the theoretical construct of interest (Bagozzi and Yi, 1991). This provides an alternative interpretation of the relationships between the constructs, which is irrelevant to the hypothesised ones. The adverse effect of common

method variance in research has prompted the development of several methods that can be used to control for CMV or lessen the possibility of its occurrence in the data. A few scholars came up with two sets of remedies that researchers may use (Bagozzi, 1984, Podsakoff et al., 2003, MacKenzie and Podsakoff, 2012). One way is to undertake procedural remedies relating to the design of a survey, which decreases respondents' ability to provide biased responses. The second way is to conduct post-hoc tests that identify the possibility of common method variance in the data (MacKenzie and Podsakoff, 2012, Podsakoff et al., 2003).

In this thesis, both procedural and statistical post-hoc remedies were used to eliminate and identify the possibility of common method bias. In line with the guidelines provided by MacKenzie and Podsakoff (2012), the questionnaire was constructed in such a way as to ensure high comprehension and clarity of terms and concepts. Vague terminology, complex wording and compound questions were avoided to ensure that reading capabilities and topic comprehension did not affect the accuracy of the responses (Krosnick, 1991). To increase the motivation to provide accurate responses, participation in the survey was voluntary and incentivised. In addition, to diminish the possible effects of social desirability bias and subjective attitude to the interviewer, all questionnaires were anonymous and distributed online without physical contact with the researchers (MacKenzie and Podsakoff, 2012).

Among the variety of statistical remedies to control for CMV, Harman's single factor test and the latent variable approach were used. Harman's single factor is the most widely used technique to check the availability of the potential issue related to common method variance. Similar to prior studies (Andersson and Bateman, 1997, Aulakh and Gencturk, 2000, Karatepe et al., 2009, Karatepe, 2010), the factor loadings of all the variables were analysed using an unrotated factor solution in exploratory factor analysis. The assumption of this test is that either several factors will emerge or one general factor will account for less than 50 % of the covariance among the variables. The second approach controls for the effect of unmeasured latent factors, which was found useful in a number of published research studies (Conger et al., 2000, Elangovan and Xie, 2000, Facteau et al., 1995, MacKenzie et al., 1991, MacKenzie et al., 1993). The procedure involves the inclusion of the first-order factor, whereby the items of the theoretical constructs are loaded both on the latent common factor and the theoretical constructs they belong to. Then,

items' standardised regression weights are examined with and without a latent common method factor to identify variance due to trait, method and random error (Podsakoff et al., 2003).

4.7.4. Multiple Regression and Multivariate Assumptions

To ensure that results are trustworthy, the assumptions conducive to multiple regression and multivariate analyses were tested, which are multicollinearity, normality, outliers, linearity and homoscedasticity (Table 17) (Osborne and Waters, 2002, Tabachnick et al., 2007). By checking these assumptions, researchers make sure that results are trustworthy and the significance of relationships are not over-or underestimated (Osborne and Waters, 2002). Multicollinearity occurs when independent variables are highly correlated. This jeopardises the accuracy of the interpretation of relationships as the effect size of the variable could be due to its correlation with other independent variables (Tabachnick et al., 2007). Collinearity diagnostics can be performed by checking tolerance and variance inflation factor (VIF) coefficients. Tolerance indicates the degree to which the variability of one predictor is not explained by the other predictor. The coefficient should be above .10, which is estimated by the formula "1- R^2 for each variable". The VIF coefficient is inverse of the tolerance value, which should be less than 10 (Thompson et al., 2017).

Outliers are extreme scores that affect the normality of the data. These are the cases with standardised residuals above 3.3 or below -3.3. Outliers can be detected by inspecting the Scatterplot, Mahalanobis Distances and Cook's Distance values when performing multiple regression analysis in SPSS. If residual statistics demonstrate any cases with values above or below the acceptable range, researchers are recommended to examine Cook's Distances. Values not higher than 1 suggest that outliers have no effect on the accuracy of the results (Tabachnick et al., 2007).

Normality, linearity and homoscedasticity assumptions indicate the nature of the examined relationships and the distribution of scores. Normality means that residuals are normally distributed about the dependent variable scores. Linearity is illustrated by the straight line of the relationship between independent and dependent variables. Homoscedasticity implies that all scores have the same variance of the residuals about the scores of dependent variables. To check

whether the assumptions are met, the Normal P-P Plot and Scatterplot should be inspected to confirm that all values lie in a reasonably straight diagonal line and are concentrated around the "0" point on the Scatterplot (Tabachnick et al., 2007). Also, the linearity of distributed scores can be analysed through curve estimation in SPSS. To confirm the linear relationship between each independent and dependent variable, the output should demonstrate that the linear model is significant and stronger than other possible relationship types (e.g. inverse, logarithmic, cubic etc.).

Table 17: Multiple regression assumptions test

Tolerance	VIF	Standardised residuals	Cook's Distance	Curve estimation
> .10	< 10	between -3.3 and 3.3	< 1	• F value higher for linear model than other types of models • p-value <0.05

4.7.5. Analysis of Moderation Effects

The analysis of the moderation effect for both research models was conducted using multi-group analysis with Amos. Multi-group analysis makes it possible to estimate path coefficients for two or more models, thus providing a comparison of the relationship between variables by controlling for a certain condition/factor (Arbuckle, 2011). Similar to published papers (e.g. (Lee et al., 2014, Lu et al., 2019)), the multi-group analysis was performed in two steps. Prior to embarking on the analysis with Amos, the sample needs to be assigned into clusters. The two possible techniques of clustering respondents include the median split method or two-step clustering analysis. For the first research model, the clustering of the sample was based on socio-demographic factors (age, economic status) and use patterns of sharing economy platforms (use frequency and use intensity) through the two-step clustering analysis. For the second research model, hedonic value, utilitarian value, self-efficacy, response efficacy and social influence continuous variables were converted into binary ones using a median split method. The median values of the variables were identified

to split the values into two categories: weak (below the median) and strong (above the median). Table 18 presents the frequency statistics of the moderating variables. Then, the measurement model between the groups was analysed to ensure that the relationships between observed and latent variables are invariant, while the structural weights between the two groups are significantly different. The second step was to analyse the moderation effect by containing the path of interest (Arbuckle, 2011).

Table 18: Clusters for moderation analysis

Moderator	Cluster 1	Cluster 2
Survey 1		
Age	20 - 39 years	≥40 years old
	N = 171	N = 316
Annual Income	$0 - $74,999	≥ $75,000
	N = 282	N = 205
Use Frequency	used in the past or use once a year	use once a month to few times a week
	N = 235	N = 252
Use Intensity	almost never use or use not intensively	Neutral use to extremely intensive use
	N = 190	N = 297
Survey 2		
Hedonic Value	Weak hedonic value	Strong hedonic value
	N = 164	N = 234
Utilitarian Value	Weak utilitarian value	Strong utilitarian value
	N = 209	N = 189
Self-efficacy	Weak self-efficacy	Strong self-efficacy
	N = 233	N = 165
Response-efficacy	Weak response-efficacy	Strong response-efficacy
	N = 198	N = 200
Social Influence	Weak social influence	Strong social influence
	N = 209	N = 189

4.8. Ethics

The research in social sciences involves potential moral issues that could arise between the researcher and participants. Researchers usually face the dilemma of addressing the objectives of the research vs respecting participants' values and rights. In such situations, ethical guidelines advise researchers to put the rights of the participants above the research objectives (Cohen et al., 2013, Aronson et al., 1990). Research ethics is defined as "*a matter of principled sensitivity to the rights of others. Being ethical limits the choices we can make in the pursuit of truth. Ethics say that while the truth is good, respect for human dignity is better, even if, in the extreme case, the respect of human nature leaves one ignorant of human nature*" (Cavan, 1977).

Ethical issues can be related to different stages of a research study. For instance, ethical issues may stem from the chosen research design, the type of analysis and the adopted approach to reporting results. Although ethical issues could arise at different points of the research, it is important to obtain informed consent from respondents prior to conducting the research (Frankfort-Nachmias and Nachmias, 2007). Informed consent is defined as "*the procedures in which individuals choose whether to participate in an investigation after being informed of facts that would be likely to influence their decision*" (Diener and Crandall, 1978). The respondents should be told about the benefits of participating in the given research and warned about potential associated risks. Informed consent demonstrates that the participants' rights are acknowledged and they reserve the right to participate in the survey or refuse. Informed consent outlines the importance of four elements: competence, voluntariness, full information and comprehension. Competence refers to the principle whereby the respondents are qualified to participate in the survey and they are in the right state of mind. Voluntariness refers to the condition whereby the respondent is given an option to refuse to participate. Full information implies that participants are provided full information about the research objectives and the impact. In a situatio when this condition cannot be upheld, reasonably informed consent should be employed (Frankfort-Nachmias and Nachmias, 2007). Still, the information should be sufficient to clearly communicate the benefits of the research and explain potential risks that the individual might be exposed to. The last element is comprehension, which refers to the assumption that respondents fully understand the objectives of the research study. Informed consent can be satisfactory only if all conditions are met (Cohen et al., 2013, Soble, 1978).

The compliance with ethical procedures was ensured by following the ethical protocol developed by Newcastle University Business School. Before starting the data collection an ethical team assessed the potential risks associated with the data collection. For the assessment, the researcher provided a document outlining the topic of the thesis, the nature of the research, its objectives and the sampling requirements (e.g. age, education, gender). Based on the ethics form, the university granted the approval to start data collection, implying that the research would not violate privacy, anonymity and confidentiality procedures. Secondly, informed consent was obtained from all respondents. To ensure the compliance to the standards of informed consent, the researchers ensured that all respondents were competent in the subject of the research, their participation was voluntary, they had sufficient information and understood the focus as well as the implications of the study. The first page of the online survey included full information about the research. In addition, the respondents were provided with a statement that the collected data would be confidential and their identity would not be exposed. Then, the respondents were advised about the option to withdraw at any point of the survey. Finally, the researcher's email address was provided in case respondents needed assistance or additional information.

5. Results and Findings

5.1. Survey 1: The Antecedents and Outcomes of Social Exchange

5.1.1. Validity and reliability analysis

The reliability and validity of the data from the first survey was evaluated based on CFA model fit indices, measurement reliability and validity coefficients and the analysis of the possibility of common method bias. The CFA model fit indices, comprising Chi-Square test results, absolute fit index and incremental fit index, were satisfactory: $\chi 2(1484) = 3748.23$, CMIN/DF = 2.526, CFI = 0.926, RMSEA = 0.056. As far as measurement reliability and validity are concerned, the analysis confirmed that the measurements were reliable and the model had no validity issues. The coefficients of factor loading were above the acceptable threshold for all items (> 0.7). Construct reliability was in the range between 0.836 and 0.969, which is above the satisfactory level (C.R. > 0.7). The lowest Cronbach's α among all constructs was 0.835, which suggests the reliability of the constructs (Hair, 2014). Average variance extracted coefficients were between 0.600 and 0.887, which is higher than the cut-off point (AVE > 0.5). AVE, CR and Cronbach's α coefficients are presented in Table 19 along with the results of the discriminant validity test. Discriminant validity results are presented as diagonal bold figures, which show that the variance-extracted estimates of the constructs are greater than the squared correlation estimates between the constructs. Finally, the result of the Harman's single-factor test demonstrated that a single factor did not account for the majority of the variance in the data (43%), which enabled us to conclude that common method bias is not an issue for this survey.

Table 19: Convergent and discriminant validity tests for survey 1

Construct	C.R.	AVE	α	1	2	3	4	5	6	7	8	9	10	11
Social Inclusion	0.947	0.600	0.945	**0.774**										
Social Ties	0.969	0.887	0.969	0.035	**0.942**									
Reciprocity	0.946	0.813	0.945	0.285	0.666	**0.902**								
Identification	0.961	0.832	0.960	0.161	0.793	0.851	**0.912**							
Shared Vision	0.960	0.800	0.959	0.120	0.796	0.796	0.870	**0.895**						
Altruistic Belief	0.906	0.709	0.902	0.318	0.342	0.487	0.433	0.404	**0.842**					
Biospheric Belief	0.836	0.718	0.835	0.277	0.273	0.434	0.344	0.336	0.808	**0.848**				
Social Value	0.946	0.747	0.946	0.277	0.658	0.748	0.826	0.765	0.462	0.434	**0.864**			
Egoistic Belief	0.867	0.766	0.859	0.157	-0.425	-0.297	-0.404	-0.432	0.058	0.005	-0.349	**0.875**		
Use Behaviour	0.867	0.766	0.891	0.536	0.402	0.607	0.540	0.525	0.406	0.380	0.658	-0.021	**0.824**	
Well-Being	0.965	0.777	0.965	0.365	0.566	0.666	0.700	0.630	0.480	0.469	0.790	-0.237	0.705	**0.882**

Notes: Diagonal figures represent the square root of the average variance extracted (AVE) and the figures below represent the between-constructs correlations

5.1.2. Multiple Regression and Multivariate Assumptions

The collinearity statistics produced during the analysis of multiple regressions between independent variables and use behaviour demonstrated that the Tolerance values were between 0.163 and 0.771, and VIF values between 1.238 and 6.145, confirming the absence of collinearity among the variables. The Scatterplot and Normal P-P Plot of distributed standardised residuals show that the scores lie along the diagonal line and around the "0" point (Figures 14, 15). However, the case-wise diagnostics showed one case with values (3.415 and -3.479) that fall out of the normal distribution range (-3.0 and 3.0). To check whether that case affected the model, Cook's Distance values were reviewed. The maximum value was 0.23, which is far less than the cut-off point, confirming that the outlier did not affect the accuracy of the results. The results of curve estimation for each relationship are provided in Table 20. The values for a linear relationship are significant and higher than the values for other types of relationships, indicating the linearity of the effects of the predictors on the dependent variables.

Figure 14: Normal P-P Plot

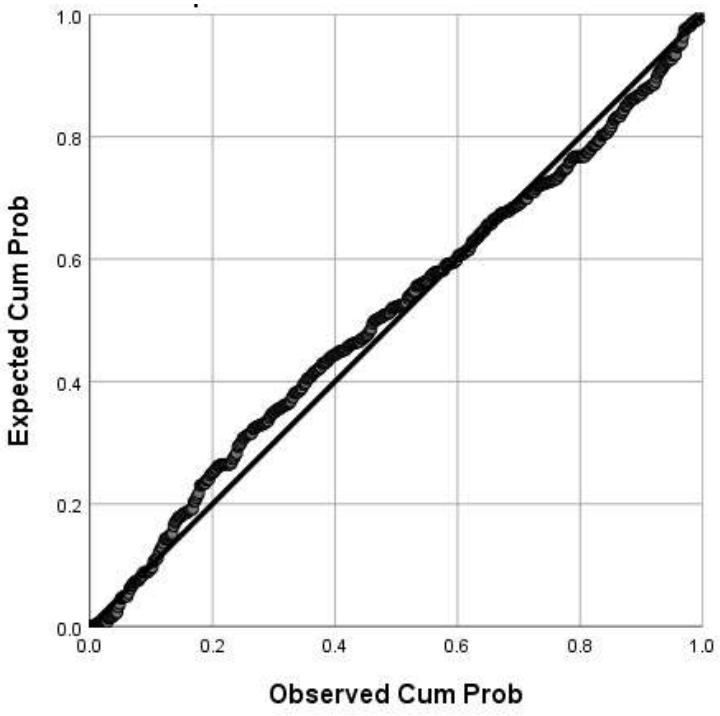


Figure 15: Scatterplot

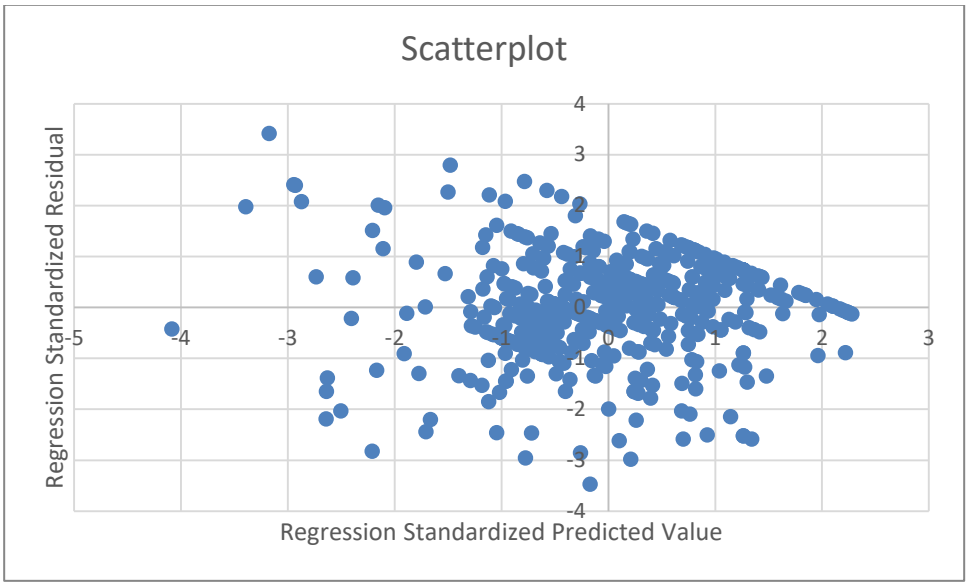


Table 20: Curve estimation results

Path	Model Type										
	Linear	Loga-rithmic	Inverse	Quadratic	Cubic	Compound	Power	S	Growth	Expo-nential	Logistic
Social Ties -> Use Behaviour	68.843 ***	44.598 ***	26.433 ***	52.842 ***	35.186 ***	55.6 ***	39.461 ***	25.409 ***	55.6 ***	55.6 ***	55.6 ***
Shared Vision -> Use Behaviour	131.65 ***	101.211 ***	63.761 ***	69.286 ***	46.249 ***	112.617 ***	100.175 ***	73.682 ***	112.617 ***	112.617 ***	112.617 ***
Identification -> Use Behaviour	149.453 ***	117.541 ***	73.422 ***	79.389 ***	54.044 ***	129.452 ***	119.515 ***	88.997 ***	129.452 ***	129.452 ***	129.452 ***
Reciprocity -> Use Behaviour	200.299 ***	144.989 ***	68.617 ***	106.182 ***	70.958 ***	169.296 ***	136.294 ***	72.952 ***	169.296 ***	169.296 ***	169.296 ***
Altruistic Belief -> Use Behaviour	72.414 ***	52.077 ***	24.069 ***	41 ***	28.013 ***	52.502 ***	40.568 ***	21.255 ***	52.502 ***	52.502 ***	52.502 ***
Biospheric Belief -> Use Behaviour	56.878 ***	44.787 ***	23.117 ***	29.386 ***	19.795 ***	51.976 ***	46.29 ***	29.802 ***	51.976 ***	51.976 ***	51.976 ***
Egoistic Belief -> Use Behaviour	116.247 ***	99.294 ***	59.861 ***	58.743 ***	39.087 ***	94.802 ***	89.307 ***	62.098 ***	94.802 ***	94.802 ***	94.802 ***
Social Value -> Use Behaviour	252.09 ***	199.06 ***	112.821 ***	127.851 ***	85.428 ***	227.341 ***	217.51 ***	151.349 ***	227.341 ***	227.341 ***	227.341 ***
Use Behaviour -> Subjective Wellbeing	343.75 ***	295.291 ***	180.036 ***	173.134 ***	115.839 ***	277.937 ***	281.069 ***	207.988 ***	277.937 ***	277.937 ***	277.937 ***
Use Behaviour -> Social Inclusion	252.09 ***	227.341 ***	164.003 ***	127.614 ***	91.232 ***	199.06 ***	217.51 ***	202.552 ***	199.06 ***	199.06 ***	199.06 ***

Significant at p: ns≥0.05; ∗< 0.05; ∗∗< 0.01; ∗∗∗< 0.001.

5.1.3. Path Analysis

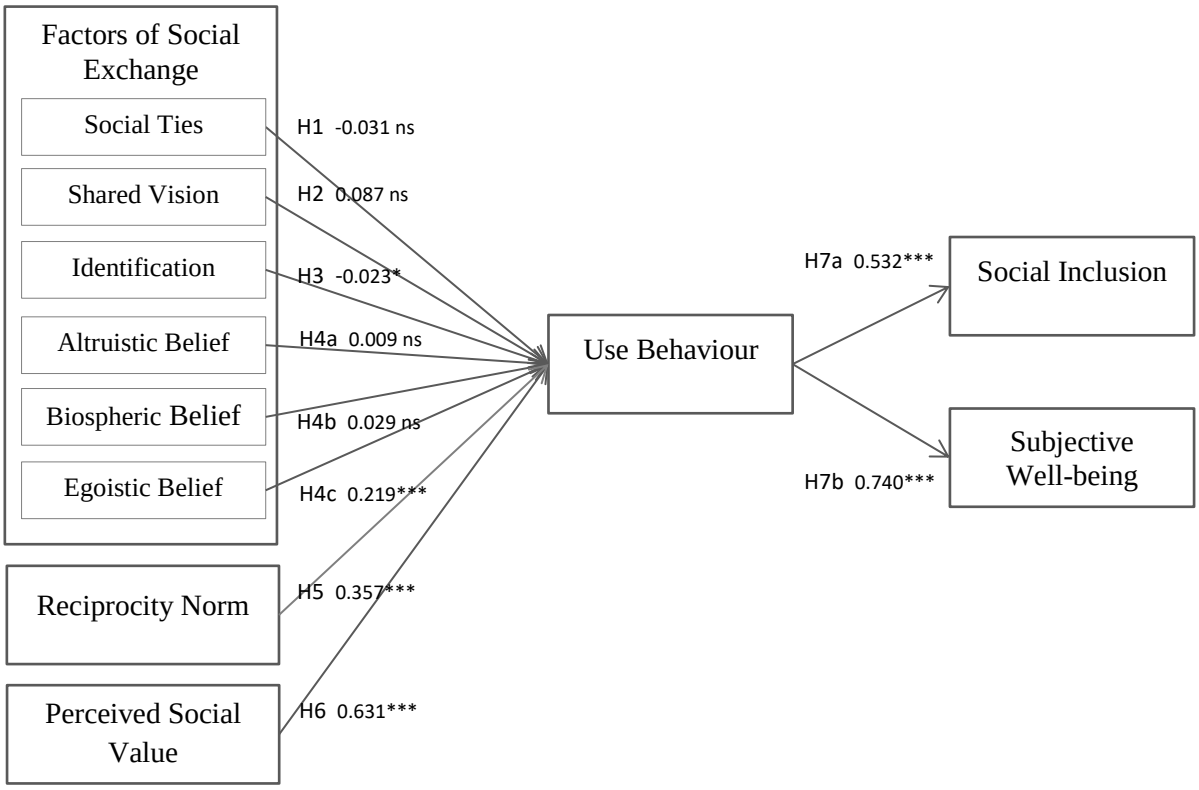
The model fit indices ($\chi 2(1501) = 4011.336$, CMIN/DF = 2.672, CFI = 0.918, RMSEA = 0.059) demonstrated that the structural model had a good fit to examine the significance of the proposed paths (Table 21, Figure 16). The model explained 57.6 % of the variance for the behaviour of sharing economy users, 28.3% of the variance for the feeling of being socially included and 54.8% for the perception of their subjective well-being. Out of ten proposed paths, six were found to be significant. The analysis of the relationships demonstrated that use behaviour was explained by the effect of four factors: Identification, Egoistic Belief, Reciprocity and Social Value (H3, H4c, H5 and H6). However, the correlation between Identification and Use Behaviour was negative, demonstrated by the effect of -0.23. In contrast, the effect of Egoistic Belief (H4c) was significant and positive, explaining the change in use behaviour by a standard deviation of 0.219. The other two antecedents had stronger effects on Use Behaviour (H4 and H6). Reciprocity Norm (H5) had a significant moderate effect, explaining almost 36% of the variance for Use Behaviour, whereas Social Value had a strong effect in association with the behaviour of sharing economy users (H6). Hypotheses H7a and H7b about the outcome of use behaviour were both significant, with path coefficients much stronger than for the antecedents of use behaviour. Four relationships were insignificant, disconfirming the effect of some constructs on use behaviour (H1, H2, H4a and H4b). Particularly, the effects of Social Ties, Shared Vision, Altruistic and Biospheric Beliefs were not supported.

Table 21: The results of hypothesis testing: the Antecedents and Outcomes of Social Exchange

Hypo-theses	Path			Coef.	(t-test)
H1	Social Ties	--->	Use Behaviour	-0.031	(-0.478ns)
H2	Shared Vision	--->	Use Behaviour	0.087	(1.019ns)
H3	Identification	--->	Use Behaviour	-0.23	(-2.024*)
H4a	Altruistic Belief	--->	Use Behaviour	0.009	(0.118ns)
H4b	Biospheric Belief	--->	Use Behaviour	0.029	(0.373ns)

H4c	Egoistic Belief	--->	Use Behaviour	0.219	(4.907***)
H5	Reciprocity	--->	Use Behaviour	0.357	(4.399***)
H6	Social Value	--->	Use Behaviour	0.631	(8.041***)
H7a	Use Behaviour	--->	Social Inclusion	0.532	(10.186***)
H7b	Use Behaviour	--->	Subjective Well-Being	0.74	(13.985***)

Figure 16: Structural equation model: the Antecedents and Outcomes of Social Exchange



Significant at p: ns≥0.05; ∗< 0.05; ∗∗< 0.01; ∗∗∗< 0.001.

5.1.4. Moderation Effects

All hypotheses except H8b showed significant effects on the paths between use behaviour and behavioural outcomes (Table 22). The moderation effect of age was found to be significant for

both hypothesised paths. The younger group of respondents (20 – 39 years old) felt more socially included and more likely to experience well-being associated with the use of sharing economy platforms. The moderation effect of annual income on the relationships between sharing economy usage, perceived social inclusion and subjective well-being was not confirmed. As far as use frequency and use intensity were concerned, the feeling of social inclusion and the perception of well-being was stronger among users who used platforms more intensively and frequently. The effect of use frequency is stronger for the relationship between use behaviour and well-being, demonstrated by a standard deviation of 0.277 .

Table 22: The moderation effects of use patterns and socio-demographic factors

H8a: Age				
Path	**$\Delta\chi^2$**	**Sig**	**20 - 39 years old Coef. (t-test)**	**≥40 years old Coef. (t-test)**
Use Behaviour --> Social Inclusion	59.23	***	.654 (8.174; ***)	.597 (7.029; ***)
Use Behaviour --> Subjective Well-being	9.979	**	.875 (8.348; ***)	.722 (10.972; ***)
H8b: Annual Income				
Path	**$\Delta\chi^2$**	**Sig**	**$0 - $74,999 Coef. (t-test)**	**≥ $75,000 Coef. (t-test)**
Use Behaviour --> Social Inclusion	1.848	ns	.518 (7.702; ***)	.554 (6.621; ***)
Use Behaviour --> Subjective Well-being	3.16	ns	.782 (11.585; ***)	.701 (8.008; ***)
H9a: Use Frequency				
Path	**$\Delta\chi^2$**	**Sig**	**used in the past or use once a year Coef. (t-test)**	**use once a month to few times a week Coef. (t-test)**
Use Behaviour --> Social Inclusion	14.536	***	.546 (4.52; ***)	.584 (9.63; ***)
Use Behaviour --> Subjective Well-being	9.756	**	.374 (7.045; ***)	.651 (11.298; ***)
H9b: Use Intensity				
Path	**$\Delta\chi^2$**	**Sig**	**almost never use or use not intensively Coef. (t-test)**	**Neutral use to extremely intensive use Coef. (t-test)**
Use Behaviour --> Social Inclusion	32.336	***	.567 (4.899; ***)	.634 (12.27; ***)
Use Behaviour --> Subjective Well-being	7.644	**	.690 (9.332; ***)	.788 (14.442; ***)

To facilitate the interoperation of the relationships between the variables in the model, the moderation of the effects of determinants by gender, age and income was tested (see Appendix 9.3.). The moderation analysis demonstrated that gender and income do not have significant effects on the relationships between the antecedents of social exchange (i.e. identification, egoistic belief, reciprocity norm, perceived social value) and use behaviour. However, it was found that gender moderates the path between use behaviour and subjective wellbeing in such a way that the perception of wellbeing is stronger with men (by 0.039 standard deviations). In contrast, age was found to explain the variance in the effects of almost all the determinants. The effect of identification on use behaviour is significant for young respondents (β= -0.091, $p<0.01$). The effect of reciprocity norm decreases by a standard deviation of 0.016 for the older group of the sample. Also, a negative moderation effect on the relationships between perceived social value and use behaviour suggests that the importance of social value for users decreases by a standard deviation of 0.164 as people grow older.

5.2. Survey 2: Reciprocity and Commitment in the Sharing Economy

5.2.1. Validity and Reliability Analysis

Confirmatory factor analysis, the analysis of the reliability and validity of measurements and common method bias tests were performed. As a result of the CFA analysis of the data from the second survey, model fit indices were satisfactory. Chi-Square test results are demonstrated by $\chi 2(574) = 1219.18$ and CMIN/DF = 2.124. As required, the absolute fit index was below 0.08 (RMSEA = 0.053) and the incremental fit index was above 0.9 (CFI = 0.956) (Hair, 2014).

The reliability and validity of the constructs were confirmed by factor loadings, Cronbach's α and a construct reliability coefficient above the acceptable threshold (> 0.7), satisfactory average variance extracted (AVE > 0.5) and convergent validity results (Hair, 2014). The lowest factor loading was 0.659 and the Cronbach's α was 0.705. Construct reliability results were in the range between 0.712 and 0.961, while average variance extracted coefficients were between 0.553 and 0.840, as demonstrated in Table 23. Diagonal bold figures represent the square root of AVE. The values are higher than the between-constructs correlations, confirming that there are no discriminant validity issues.

To eliminate the possibility of misleading results, the Harman's single-factor test and a statistical procedure using the effect of a latent method factor were performed. The Harman's single-factor test demonstrated that a single factor accounts for 52% of the variance in the data, which is slightly above the acceptable threshold. Therefore, a second method by controlling the effect of an unmeasured latent construct was used. This method was suggested by Podsakoff et al. (2003) and is widely used by researchers (Conger et al., 2000, Elangovan and Xie, 2000, Facteau et al., 1995, MacKenzie et al., 1991, MacKenzie et al., 1993) as a robust test of the identification of the possibility of common method variance (CMV). Table 24 shows that the difference in the regression weights among measurement models with and without the common latent factor is minimal (between 0 – 0.09), suggesting that no single factor is affected by common method bias. After rejecting the possibility of CMV, the model fit in SEM and the hypothesised relationships were tested using Amos v.25.

Table 23: Convergent and discriminant validity tests for survey 2

Construct	C.R.	AVE	α	1	2	3	4	5	6	7	8	9	10	11
Equity Sensitivity	0.858	0.548	0.855	**0.740**										
Social Identity	0.954	0.839	0.953	0.348	**0.916**									
Outgroup Comparison	0.935	0.826	0.934	0.370	0.823	**0.909**								
Ingroup Comparison	0.910	0.835	0.909	0.355	0.865	0.872	**0.914**							
Procedural Justice	0.912	0.776	0.912	0.337	0.769	0.841	0.805	**0.881**						
Distributive Justice	0.903	0.823	0.903	0.356	0.710	0.857	0.768	0.860	**0.907**					
Reciprocity Perception	0.928	0.811	0.928	0.287	0.698	0.582	0.729	0.639	0.556	**0.901**				
Emotion-focused Coping	0.712	0.553	0.712	0.134	0.637	0.629	0.636	0.650	0.598	0.723	**0.744**			
Problem-focused Coping	0.875	0.700	0.874	0.330	0.712	0.758	0.713	0.788	0.777	0.613	0.715	**0.836**		
Relationship Commitment	0.961	0.804	0.960	0.353	0.792	0.788	0.830	0.821	0.754	0.709	0.646	0.766	**0.897**	
Maximisation Predispos.	0.897	0.687	0.894	0.355	0.554	0.733	0.608	0.729	0.803	0.461	0.564	0.735	0.677	**0.829**

Notes: Diagonal figures represent the square root of the average variance extracted (AVE) and the figures below represent the between-constructs correlations

Table 24: Results of the latent common method factor test

Construct	Item	Standardised regression weights (model with a latent factor)	Standardised regression weights (model without a latent factor)	Difference
Social Identity	Item 1	0.871	0.869	-0.002
	Item 2	0.927	0.93	0.003
	Item 3	0.948	0.949	0.001
	Item 4	0.924	0.915	-0.009
Outgroup Comparison	Item 1	0.876	0.896	0.02
	Item 2	0.916	0.928	0.012
	Item 3	0.897	0.903	0.006
Ingroup Comparison	Item 1	0.882	0.891	0.009
	Item 2	0.931	0.936	0.005
Distributive Justice	Item 1	0.846	0.907	0.061
	Item 2	0.872	0.907	0.035
Procedural Justice	Item 1	0.873	0.886	0.013
	Item 2	0.877	0.889	0.012
	Item 3	0.882	0.868	-0.014
Equity Sensitivity	Item 1	0.64	0.659	0.019
	Item 2	0.675	0.689	0.014
	Item 3	0.776	0.788	0.012
	Item 4	0.747	0.737	-0.01
	Item 5	0.829	0.816	-0.013
Predisposition towards maximisation	Item 1	0.764	0.861	0.097
	Item 2	0.748	0.868	0.12
	Item 3	0.658	0.699	0.041
	Item 4	0.784	0.874	0.09
Reciprocity	Item 1	0.898	0.894	-0.004
	Item 2	0.904	0.913	0.009
	Item 3	0.883	0.895	0.012
Problem-focused coping	Item 1	0.813	0.825	0.012
	Item 2	0.786	0.808	0.022
	Item 3	0.863	0.875	0.012
Emotion-focused coping	Item 1	0.736	0.736	0
	Item 2	0.781	0.751	-0.03
Commitment	Item 1	0.846	0.844	-0.002
	Item 2	0.898	0.898	0
	Item 3	0.931	0.93	-0.001
	Item 4	0.934	0.933	-0.001
	Item 5	0.875	0.874	-0.001

	Item 6	0.895	0.897	0.002

5.2.2. Multiple Regression and Multivariate Assumptions

The test of multiple regression assumptions produced satisfactory results. The possibility of multicollinearity was eliminated as the Tolerance values were between 0.211 and 0.862, and the VIF values were between 1.145 and 4.872. According to the Scatterplot and Normal P-P Plot of distributed standardised residuals, all scores were placed along the diagonal line and around the "0" point (Figures 17, 18). Still, the case-wise diagnostics showed that four cases were beyond the normal distribution range (-3.0 and 3.0). However, Cook's Distance analysis suggested that those extreme cases did not affect the results, as the maximum value was 0.059, which is less than the maximum cut-off point. Table 25 presents the results of curve estimation for each relationship. The values for a linear model are significant and higher than the values for other types of models, indicating the linearity of the relationships between variables.

Figure 17: Normal P-P Plot

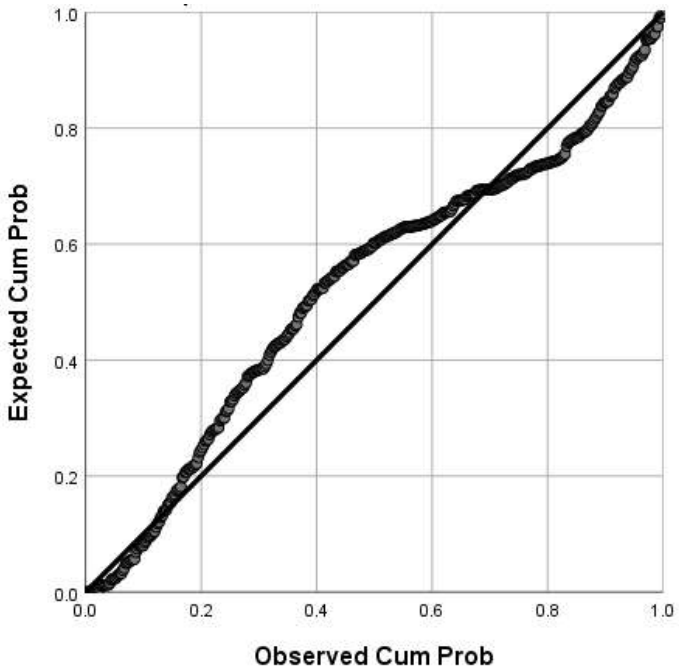


Figure 18: Scatterplot

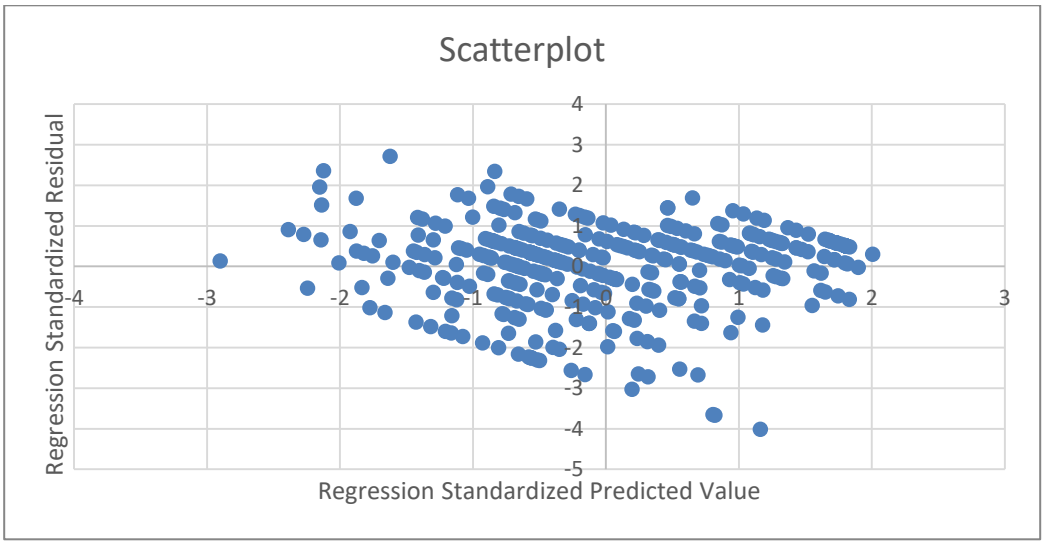


Table 25: Curve estimation results

Path	Model Type										
	Linear	Loga-rithmic	Inverse	Quadratic	Cubic	Compound	Power	S	Growth	Expo-nential	Logistic
Social Identity --> Perceived Reciprocity	301.194 ***	209.163 ***	99.342 ***	167.14 ***	111.165 ***	191.779 ***	151.282 ***	82.701 ***	191.779 ***	191.779 ***	191.779 ***
Outgroup Comparison --> Perceived Reciprocity	167.222 ***	134.531 ***	83.003 ***	95.723 ***	64.838 ***	93.582 ***	81.886 ***	58.87 ***	93.582 ***	93.582 ***	93.582 ***
Ingroup Comparison --> Perceived Reciprocity	335.955 ***	245.234 ***	126.863 ***	188.434 ***	125.718 ***	204.379 ***	171.832 ***	107.984 ***	204.379 ***	204.379 ***	204.379 ***
Equity Sensitivity --> Perceived Reciprocity	26.015 ***	13.593 ***	3.58 ns	28.753 ***	19.329 ***	18.434 ***	9.798 **	2.569 ns	18.434 ***	18.434 ***	18.434 ***
Predis. to Maximisation --> Perceived Reciprocity	95.33 ***	78.975 ***	49.015 ***	54.493 ***	41.536 ***	53.168 ***	50.268 ***	40.339 ***	53.168 ***	53.168 ***	53.168 ***
Procedural Justice --> Perceived Reciprocity	213.251 ***	173.277 ***	104.64 ***	120.775 ***	82.454 ***	125.246 ***	110.546 ***	77.916 ***	125.246 ***	125.246 ***	125.246 ***
Distributive Justice --> Perceived Reciprocity	139.295 ***	114.091 ***	71.167 ***	82.412 ***	60.563 ***	74.149 ***	65.308 ***	47.858 ***	74.149 ***	74.149 ***	74.149 ***
Emotion-Focused Coping --> Commitment	161.152 ***	96.008 ***	34.562 ***	120.174 ***	80.075 ***	104.148 ***	71.168 ***	31.961 ***	104.148 ***	104.148 ***	104.148 ***
Problem-Focused Coping --> Commitment	398.205 ***	293.164 ***	161.272 ***	234.69 ***	156.927 ***	260.644 ***	225.038 ***	157.582 ***	260.644 ***	260.644 ***	260.644 ***
Perceived Reciprocity --> Commitment	330.38 ***	216.663 ***	119.768 ***	214.902 ***	142.911 ***	245.21 ***	191.247 ***	125.831 ***	245.21 ***	245.21 ***	245.21 ***
Perceived Reciprocity --> Emotion-Focused Coping	211.242 ***	148.16 ***	84.611 ***	125.74 ***	83.965 ***	141.039 ***	113.11 ***	74.391 ***	141.039 ***	141.039 ***	141.039 ***
Perceived Reciprocity --> Problem-Focused Coping	170.308 ***	99.007 ***	46.647 ***	151.769 ***	100.938 ***	136.304 ***	87.295 ***	46.056 ***	136.304 ***	136.304 ***	136.304 ***

Significant at p: ns≥0.05; ∗< 0.05; ∗∗< 0.01; ∗∗∗< 0.001.

5.2.3. Path Analysis

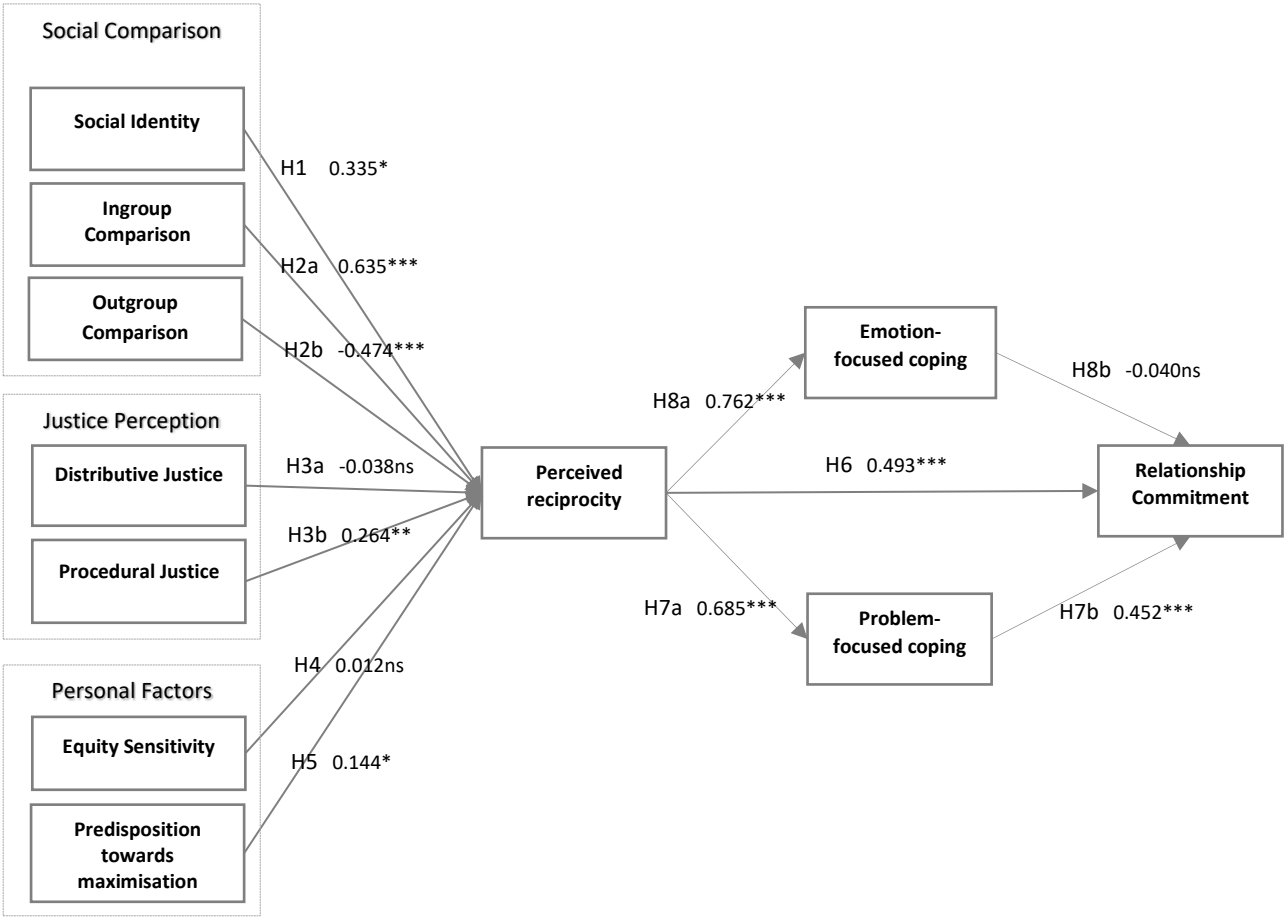
The results of the analysis of the structural model are presented in Table 26 and Figure 19 demonstrated satisfactory model fit indices ($\chi 2(596) = 1622.9$, CMIN/DF = 2.723, CFI = 0.931, RMSEA = 0.066). The model explained 69% of the variance for Reciprocity Perception, 58% of the variance for Emotion-focused Coping, 47% for Problem-focused Coping and 70% for Relationship Commitment. Out of 12 proposed relationships, nine were significant. The test of the hypotheses about the determinants of Reciprocity Perception indicated a significant effect of four factors: Social Identity, Ingroup Comparison, Procedural Justice and Predisposition Towards Maximisation (H1, H2a, H3b, H5). The effect of Social Identity was small, represented by a standard deviation of 0.3. The relationship between Ingroup Comparison and Reciprocity Perception was quite strong, represented by an effect of 0.635. The effect size of Procedural Justice was illustrated by a standard deviation 0.264 , while the effect of Predisposition Towards Maximisation was 0.144. As suggested, the negative effect of Outgroup Comparison (H2b) on Reciprocity Perception was confirmed too. However, the effects of two antecedents were not significant, namely Equity Sensitivity and Distributive Justice. These results rejected Hypotheses H3a and H4. The results demonstrated that out of all the variables, the most important was Ingroup Comparison, which explained more variance in the dependent variable compared to other factors. As far as the cognitive and behavioural outcomes of perceived reciprocity are concerned, hypotheses 6, 7a and 8a were supported. That means that Perceived Reciprocity positively correlated with Relationship Commitment, Problem-Focused Coping and Emotion-Focused Coping, illustrated by the effect size of 0.493, 0.685 and 0.762 respectively. The path from Reciprocity Perception to coping behaviours was strong, suggesting that after exchange relations, individuals are more likely to have emotional or physical responses, rather than commit to future transactions. The hypothesis about the correlation of Problem-Focused Coping and Relationship Commitment was supported, showing a moderate strength of the relationship (H7b). In contrast, the effect of Emotion-focused Coping on Relationship Commitment was not confirmed (H8b). Figure 21 illustrates the structural paths of the model.

Table 26: Results of hypothesis testing: Reciprocity and Commitment in the Sharing Economy

Hypo-thesis	Path			Coef.	(t-test)
H1	Social Identity	→	Reciprocity Perception	0.335	(3.854***)
H2a	Ingroup Comparison	→	Reciprocity Perception	0.635	(5.351***)
H2b	Outgroup Comparison	→	Reciprocity Perception	-0.474	(-3.797***)
H3a	Distributive Justice	→	Reciprocity Perception	-0.038	(-0.333 ns)
H3b	Procedural Justice	→	Reciprocity Perception	0.264	(2.665**)
H4	Equity Sensitivity	→	Reciprocity Perception	0.012	(-0.296 ns)
H5	Maximisation Predisposition	→	Reciprocity Perception	0.144	(1.983*)
H6	Reciprocity Perception	→	Relationship Commitment	0.493	(6.645***)
H7a	Reciprocity Perception	→	Problem-focused Coping	0.685	(12.867***)
H7b	Problem-focused Coping	→	Relationship Commitment	0.452	(7.889***)
H8a	Reciprocity Perception	→	Emotion-focused Coping	0.762	(13.078***)
H8b	Emotion-focused Coping	→	Relationship Commitment	-0.040	(-0.568 ns)

Significant at p: ns≥0.05; ∗< 0.05; ∗∗< 0.01; ∗∗∗< 0.001.

Figure 19: Structural equitation model: Reciprocity and Commitment in the Sharing Economy



Significant at p: ns≥0.05; ∗< 0.05; ∗∗< 0.01; ∗∗∗< 0.001.

5.2.4. Moderation effects

The results demonstrated that hedonic value moderates all hypothesised paths, except the relationship between procedural justice and perceived reciprocity (H9). The higher the effect of hedonic value, the lower is the strength of the relationships between reciprocity, problem-focused coping and relationship commitment. The variance in the effect of reciprocity on emotion-focused coping between users with weak vs strong hedonic value is significant but very mild.

The moderation effect of utilitarian value was confirmed for all hypothesised paths (H10). The relationship between procedural justice and reciprocity perception is significant for people who have weak utilitarian value. The perception of the utility of relations in the sharing economy increases the effect of perceived reciprocity on coping mechanisms. The effect on emotion-focused coping is different by a standard deviation of 0.045 between the two user clusters, while the effect on problem-focused coping differs by a standard deviation of 0.233. Although the moderation effect on the path from problem-focused coping to relationship commitment was significant, the difference in the effect size between the two clusters of respondents is minimal. The moderation effect of self-efficacy (H11a) was found to be significant for the relationships between perceived reciprocity and both coping behaviours. The result shows the stronger effects on emotion-focused and problem-focused coping for users who have strong self-efficacy. In addition, hypotheses 11b and 11c were partly supported. The results show that a high degree of response efficacy increases the effect of perceived reciprocity on emotion-focused coping (by a standard deviation of 0.235) and problem-focused coping (by a standard deviation of 0.321), and increases the effect of problem-focused coping on relationship commitment (by a standard deviation of 0.228). Similarly, individuals who are more subjected to social influence are more likely to use coping mechanisms. The results of moderation analysis are presented in Table 27.

Table 27: The moderation effects of values, self-efficacy, response-efficacy and social influence

H9: Hedonic value				
Path	**$\Delta\chi^2$**	**Sig**	**Weak hedonic value Coef. (t-test)**	**Strong hedonic value Coef. (t-test)**
Procedural Justice ---> Reciprocity	1.133	ns	0.214 (0.044ns)	0.237 (2.467*)
Reciprocity ---> Emotion-Focused Coping	33.269	***	0.564 (10.253***)	0.563 (3.004**)
Reciprocity ---> Problem-Focused Coping	16.993	***	0.554 (8.095***)	0.371 (1.815ns)
Problem-Focused Coping ---> Relationship Commitment	11.891	**	0.589 (6.904***)	0.436 (3.815***)
H10: Utilitarian value				
Path	**$\Delta\chi^2$**	**Sig**	**Weak utilitarian value Coef. (t-test)**	**Strong utilitarian value Coef. (t-test)**

Procedural Justice → Reciprocity	4.807	*	0.261 (3.212**)	0.195 (-0.296ns)
Reciprocity → Emotion-Focused Coping	19.046	***	0.624 (3.488***)	0.669 (10.539***)
Reciprocity → Problem-Focused Coping	3.971	*	0.427 (3.637***)	0.660 (8.837***)
Problem-Focused Coping → Relationship Commitment	5.391	*	0.386 (3.664***)	0.365 (5.697***)
H11a: Self-efficacy				
Path	**$\Delta\chi^2$**	**Sig**	**Weak self-efficacy Coef. (t-test)**	**Strong self-efficacy Coef. (t-test)**
Reciprocity ---> Emotion-Focused Coping	34.573	***	0.604 (2.834**)	0.682 (11.535***)
Reciprocity ---> Problem-Focused Coping	3.900	*	0.445 (4.442***)	0.654 (8.038***)
Problem-Focused Coping ---> Relationship Commitment	3.624	ns	0.407 (4.701***)	0.430 (5.576***)
H11b: Response efficacy				
Path	**$\Delta\chi^2$**	**Sig**	**Weak response efficacy Coef. (t-test)**	**Strong response efficacy Coef. (t-test)**
Reciprocity ---> Emotion-Focused Coping	13.856	***	0.471 (3.662***)	0.706 (9.951***)
Reciprocity ---> Problem-Focused Coping	12.089	**	0.371 (1.840ns)	0.692 (9.313***)
Problem-Focused Coping ---> Relationship Commitment	9.316	**	0.321 (3.968***)	0.549 (6.032***)
H11c: Social Influence				
Path	**$\Delta\chi^2$**	**Sig**	**Weak social influence Coef. (t-test)**	**Strong social influence Coef. (t-test)**
Reciprocity ---> Emotion-Focused Coping	28.000	***	0.597 (2.840**)	0.609 (9.339***)
Reciprocity ---> Problem-Focused Coping	25.699	***	0.404 (1.159ns)	0.627 (8.802***)
Problem-Focused Coping ---> Relationship Commitment	3.802	ns	0.420 (4.143***)	0.412 (5.473***)

The research model was also tested by controlling for the effects of socio-demographic variables, such as gender, age and income. The results of the analysis are provided in Appendix 9.4. When controlling for the effect of gender, the analysis showed that the effect of social identity on perceived reciprocity is significant only for women (β=0.364, p<0.001). For female respondents, the negative relationship between outgroup comparison and perceived reciprocity weakens (by a standard deviation of 0.059), and the positive relationship between ingroup comparison and the

perception of reciprocity decreases (by a standard deviation of 0.136). The effect of procedural justice is significant only for men (β=0.405, $p<0.01$). The effect of perceived reciprocity on emotion-focused coping is stronger for women (by a standard deviation of 0.022), while the effect on problem-focused coping is stronger for men (by a standard deviation of 0.147). Women are more committed to sharing economy platforms following the evaluation of reciprocity in relations. This is represented by the effect size of the factor for the female cluster (β= 0.636, $p<0.001$) compared to the male group of respondents (β= 0.585, $p<0.001$). Also, only women tend to feel commitment to platforms after problem-focused coping behaviour (β= 0.414, $p<0.001$).

Age moderates the relationships in the model in such a way that the positive effect of social identity (β= 0.303, $p<0.001$) and a negative effect of outgroup comparison (β= -0.402, $p<0.01$) on perceived reciprocity is significant only for older people. Consequently, older people are less likely to compare their rewards and costs with the rewards/costs of people inside their social group (by a standard deviation of -0.148). The effect of the predisposition towards maximisation is significant only for younger respondents (β= 0.209, $p<0.05$), while the effect of procedural justice is supported only for older respondents (β= 0.186, $p<0.05$). The effects of perceived reciprocity on emotion- and problem-focused coping are stronger for younger people (by standard deviations of 0.074 and 0.097). Similarly, the correlation between problem-focused coping and commitment is stronger for the younger group of respondents. In contrast, older people are more likely to feel committed to platforms after the evaluation of reciprocity (by a standard deviation of 0.068).

As far as the income moderation is concerned, the results demonstrated that the effect of social identity on reciprocity is slightly stronger for people with lower income (by a standard deviation of 0.04). The control variable positively moderates the effects of comparison factors, meaning that there is a higher dependence of perceived reciprocity on ingroup comparison (by a standard deviation of 0.047) and a lower dependence of perceived reciprocity on outgroup comparison (by a standard deviation of 0.09) among respondents with high-income. The role of procedural justice is significant only for the high-income cluster (β= 0.265, $p<0.05$), while the effect of predisposition towards maximisation is significant for younger respondents (β= 0.209, $p<0.05$). High income increases the contribution of perceived reciprocity to problem-focused and emotion-

focused coping (by 0.046 and 0.034 standard deviations). Also, it decreases the effects of reciprocity and problem-focused coping on relationship commitment (by standard deviations of 0.007 and 0.11).

6. Discussion

6.1. The Social and Psychological Antecedents and the Outcomes of Social Exchange

6.1.1. Social Capital and Social Value

The thesis adopted the social exchange approach to explore the sharing economy from the user's perspective. In line with the theory and previous research on the sharing economy, the effects of eight constructs (social ties, identification, shared vision, reciprocity, altruistic, biospheric and egoistic beliefs and social value) on use behaviour were hypothesised. The main premises of the social exchange theory were confirmed. However, some antecedents related to social capital were insignificant, disconfirming their power in explaining sharing economy practices.

Four hypotheses about the relationship between social ties, shared vision, pro-environmental beliefs and use behaviour were not supported. The thesis sheds light on the relationship between bonding social ties and use behaviour, which have been controversial to date (e.g. (Wasko and Faraj, 2005, Ellison et al., 2007, Kim et al., 2017)). For example, the study examining the cooperation of people through the electronic network of practice (computer-mediated forums enabling discussion and the exchange of knowledge about the problems of practice) confirmed the positive effect of structural social capital on the exchange of knowledge (Wasko and Faraj, 2005). The availability of social ties was also found to be a significant determinant of the evaluation of knowledge sharing (Chiu et al., 2006). This is in contrast to the finding indicating lack of correlation between social ties and accommodation sharing (Kim et al., 2017). This thesis provides a result which is in line with the latter study, suggesting that people use sharing platforms irrespective of the strength of social ties within a community. They engage in the sharing economy to make new connections and increase bridging ties in the network. The finding of the role of social capital suggest redefining the role of bonding social ties in the reinforcement of connections (Putnam, 1995) in virtual collaborative spaces. While developing bonding ties sustains offline communities, online platforms have the capability to substitute those relations by semi-automated functions, like reputation systems, storage, feedback and reviews. Similarly, the effect of shared vision is not an important driver of collaborations either. The insignificant effect

is inconsistent with prior research suggesting that users' collaborative behaviour in knowledge sharing networks is explained by the positive influence of cognitive social capital (Wasko and Faraj, 2005, Chiu et al., 2006). There are two plausible explanations for this result. First, drawing on the finding of a previous study (Chiu et al., 2006), the effect of shared vision could differ depending on the type of platform that respondents used. Hence, it is suggested that the effect of the construct be tested, taking into account the moderating role of the type of platform, thus throwing light on the correlations between the type of practice, shared vision and use behaviour. Second, in view of the insignificant effect of social ties, it is predictable that people do not develop collective self-esteem, a feeling of partnership and commitment based on shared background with other users of the platforms. Accordingly, the findings provide new insight into the role of shared vision in social relations enabled by online sharing platforms. The insignificant effect of pro-environmental beliefs is surprising in view of the published literature arguing that sustainability and altruistic motives are strong predictors of use (Kwon and Wen, 2010, Stern, 2000, Burroughs and Rindfleisch, 2002). However, the quantitative research by Möhlmann (2015) postulated that pro-environmental values are not central for the compensated practice of car and accommodation sharing. A possible interpretation of the insignificant effect of pro-environmental beliefs is that values differ depending on the type of practice. The prevailing driver for monetary-based transactions could be cost-savings, which would outweigh altruistic and environmental motives. Given the thesis did not control for the type or practice, this argument could be developed further in future empirical studies.

The hypothesised effects of identification, reciprocity norm, egoistic belief, social value on use behaviour, and the positive relationship between behaviour and outcomes were supported. A significant path between reciprocity norm and use behaviour suggests that participation in the sharing economy is based on the belief that the exchange of resources will be reciprocated either immediately or in future transactions. This is consistent with the research examining reciprocity norms in the context of free and market-based exchange (Shiau and Luo, 2012, Kim et al., 2017). Prior research found that consumer satisfaction with buying through online platforms is predetermined by the expectation of reciprocity (Shiau and Luo, 2012). Evidence from previous studies also suggested that the norm of reciprocity manifests a significant influence on behaviour not only in market-based relations, but in non-commercial exchange of intangible resources. It was found that the intensity of knowledge sharing is explained by individuals' salience of

reciprocity norm. That means that people contribute as much effort as they think they will receive in return (Chiu et al., 2006). Hence, this research demonstrates that the investigation of the reciprocity norm concept in the sharing economy context provides a result which is congruent with the rest of the above literature. Also, the finding that age moderates the effect of reciprocity norm on behaviour suggests that as people grow older, the predictive role of the reciprocity norm in exchange relations declines. The finding of this thesis provides much-needed empirical evidence in relation to the discussion about the lack of pure altruistic motives in gift-giving and sharing practices (Skågeby, 2010). The significant positive effect of egoistic belief contradicts the majority of previous studies (Kwon and Wen, 2010, Stern, 2000). However, it is consistent with the established insignificant effect of pro-environmental beliefs on use behaviour. This means that people care more about the satisfaction of their own needs rather than helping others or contributing to a sustainable environment. Both the insignificant role of pro-environmental beliefs and the positive role of egoistic belief demonstrate a new perspective on the drivers of the sharing economy. Against the popular opinion in the academic literature that the sharing economy rests upon the idea of challenging overconsumption, overproduction, social and economic inequality and pollution issues (Martin, 2016, Martin and Upham, 2016), environmental benefits seem to be rather unintended outcomes. These results may demonstrate the transformation of the sharing economy into a commercially-oriented system, thus signalling the need to reconsider the conceptualisation and framing of the phenomenon and the role of consumers in it. The effect of the identification of users with the community is negative, which goes against most evidence in the literature (Kwon and Wen, 2010, Barnes and Mattsson, 2017). When testing the path by controlling for socio-demographic characteristics, it was found that the effect of identification is significant only for young people. This result suggests that it is not likely that young people feel very positive, proud and close to other members of sharing economy platforms to embark on transactions. In light of the established significance of egoistic belief and reciprocity norms, strong commitment towards communities may hinder the fulfilment of personal goals that conflict with the socially-oriented agenda of sharing economy platforms. The strongest predictor of all the proposed constructs was social value, which is relatively more important for younger respondents. This finding confirmed the assumption that people are motivated by the belief that the sharing economy satisfies their personal needs, facilitates social relationships with other members of the community, and creates an image of environmentally

conscious behaviour (Barnes and Mattsson, 2017, Lampinen et al., 2015, Böcker and Meelen, 2017, Priporas et al., 2017). By juxtaposing the correlation results of social value and pro-environmental belief with use behaviour, the findings of this thesis provide an interesting picture of the psychological underpinnings of sharing economy users' behaviour. The findings indicate that against the backdrop of anti-consumption movements and green planet initiatives, people are growing conscious about the favourable model of behaviour in the society, although having no belief in the need and positive consequences of pro-environmental behaviour. This research opens a different perspective on the behaviour of platform users by suggesting that the sharing economy does not transform the way people use resources, but rather repackages it in a more socially appealing way.

6.1.2. Outcomes of Using the Sharing Economy

The analysis of behavioural outcomes suggests that users of platforms feel socially included and to a greater extent experience subjective well-being. While previous research gave grounds to suggest that collective-oriented practices are positively correlated with subjective well-being (Burroughs and Rindfleisch, 2002), no empirical investigation in the context of the sharing economy has ever taken place. For instance, examination of materialism and subjective wellbeing indicated a negative correlation between the two constructs. Material values were found to undermine collective values, such as those that support family relations. The conflict between the two types of values creates a psychological tension, which reduces the perception of wellbeing (Burroughs and Rindfleisch, 2002). As far as evidence from the sharing economy literature is concerned, the positive outcomes of the emergent economy were suggested by the impact on socio-economic structures (e.g. the development of informal employment, contribution to the welfare of socially-excluded groups and boosting new small-scale ventures) (Pyka, 2017). In light of the above, this thesis provides the first empirical evidence of the users' perceived inclusion in society and life satisfaction following the use of sharing economy platforms. The findings confirm that the sharing economy promotes the integration of users with the community by providing access to vital resources to achieve satisfactory living standards. To enrich the insight, use frequency, use intensity, income and age were controlled for when examining correlations between use behaviour and outcomes. The significant moderating effects of use frequency and use intensity mean that users accumulate a feeling of satisfaction with life, social

integration, the accessibility to financial resources and social benefits over the course of engaging with the sharing economy. As far as socio-demographic factors are concerned, the findings suggest that the perception of wellbeing is stronger for male respondents. When it came to controlling for income, the results were in conflict with the majority of previous research in terms of the relative importance of lower and higher-income clusters (Bradburn and Caplovitz, 1965, Graham, 2004, Senik, 2003). This result can be explained by looking at the effect of comparison income (i.e. relative income of a referent group) on the perception of social inclusion and well-being. The moderating effect of comparison income was proposed in a small stream of research (e.g. (Clark and Oswald, 1996)). The tendency of people to compare their benefits with the gains of referent others, potentially from the same group (Festinger, 1954), might explain the perception of the low variance of the economic status of people in the sharing economy. Younger users were more optimistic in relation to the outcomes of the use behaviour irrespective of their economic status. This is surprising considering that age is associated with income. These findings suggest that people's norms, beliefs and values are formed irrespective of their economic background, but are nurtured as people grow older. People tend to reassess the prominence of their position within the community, and at the same time develop more scepticism about the idealistic outcomes of their behaviour.

6.2. Reciprocity and Commitment in the Sharing Economy

6.2.1. Antecedents of Reciprocity Perception

The established effects of ingroup and outgroup comparison factors support evidence from prior research (Anthony, 2005), suggesting that individuals with a strong social identity tend to collaborate with members of the sharing economy community, rather than outside of it. Such a tendency is stronger among young people with high income. The size and the direction of the effect of comparison factors (ingroup and outgroup comparisons) suggest two potential reasons that influence people's evaluation of reciprocity. The first plausible reason is that the tendency to compare input/output with those of other members of sharing economy platforms may represent a form of in-group favouritism (biased attitude), which can be manifested unconsciously (Tajfel, 1974). The second possible interpretation could be that ingroup comparison reflects a rational

decision to favour members of the group they belong to, with the purpose of building long-term collaborative relations (Rabbie et al., 1989).

The insignificant effect of distributive justice was against the major stream of the literature, which found a positive correlation between a fair distribution of rewards and positive outcomes of relations (e.g. reciprocity, satisfaction) (Chan and Lai, 2017, Adams, 1963, Piccoli and De Witte, 2015). Specifically, prior research found that the perception of distributive and procedural justice determines the outcome of inter-personal relations (Rubenstein et al., 2019). Distributive justice was found to predict positive affective responses (Chan and Lai, 2017) and behaviour intention (Chiu et al., 2007), while procedural justice was found to be a contributor to relationship commitment (McFarlin and Sweeney, 1992). The inconsistent finding of this thesis can be explained by the context of the research. Distributive justice has mostly been examined in an organisational context, where reciprocation is quantifiable. In contrast, collaborative relations are based on the exchange of intangible resources (i.e. services, skills) that are often difficult to measure. This finding denotes that the role of justice can be different depending on the type of practice and the resources being exchanged. The positive effect of procedural justice is consistent with prior literature (Folger and Konovsky, 1989, Van Dijke et al., 2019). Against the insignificant effect of distributive justice, the supported relationship between procedural justice and reciprocity confirms that users are more concerned with the degree to which procedures of sharing economy transactions are fair, rather than focus on the fair outcome of relations. A possible interpretation of the finding is that procedures play a significantly more important role in regulating relations in sharing economy communities, because the sharing economy is primarily enabled by social interactions and communication between actors. The results of the analysis by controlling for age and income provide a deeper understanding of the significance of this factor for particular social groups. They suggest that the fairness of the procedures of resources exchange is more important for older groups of respondents with a higher income. With higher income and more experience in social relationships, older people can be more demanding in terms of how they are treated by other parties of the sharing economy.

The insignificant effect of equity sensitivity on perceived reciprocity is against prior research, which suggests that benevolent people are more likely to perceive the fairness of relations and experience satisfaction (Huseman et al., 1987, King Jr and Miles, 1994, Westerlaken et al., 2017,

Bourdage et al., 2018). This means that the degree to which people perceive reciprocity in relations does not depend on the degree to which people tolerate inequity. The positive effect of predisposition towards maximisation on reciprocity perception means that individuals who aim for result maximisation are more satisfied with the outcome of relations between parties in sharing economy transactions. When it comes to the effect of the age variable on the relationship between the outcome maximisation trait and perceived reciprocity, young people are more inclined to maximise outcomes when engaging in exchange relations. This could mean that young people are idealistic and willing to maximise outcomes in all tasks that unfold. Older people are effective in prioritising the choices and activities that are most important for them. The positive effect of the factor is inconsistent with prior research (Iyengar et al., 2006, Schwartz, 2004). The potential explanations of the established relationship can be drawn from the study by Karimi et al. (2018), who argued that maximisers may be more satisfied with outcomes than satisficers if they do not think about forgone alternatives. This condition may be achieved if users of sharing economy platforms conduct a rigorous evaluation of the decision prior to engaging in transactions, thus ruling out all potential alternatives. Such a scenario seemed not plausible, given that the use of sharing economy platforms is often associated with utility maximisation for the benefit of the society rather than oneself (Schneider, 2017). However, the finding suggests that individuals' predisposition towards maximisation may stay dormant or manifest itself differently across different sharing economy transactions. Those transactions vary greatly by the resources that are exchanged through platforms (i.e. second-hand vs new, tangle vs intangible), the payment terms and the activity sectors (transport, service, retail etc.).

6.2.2. Consequences of Reciprocity Perception

The significant effect of reciprocity perception on the commitment to sharing economy platforms demonstrates that the perception of reciprocity contributes to the development of trustworthy relations in the community, which is the condition of long-term relationships (Thielmann and Hilbig, 2015, Wang et al., 2020). The findings are consistent with the stream of research investigating the positive impact of reciprocal relations, in terms of fostering commitment, inter-personal relations and relationship satisfaction (Myers et al., 2013). In addition, the findings complement the research which indicated that the relationship between the fair outcome of relations and commitment is mediated by cognitive and affective factors (Coyle-Shapiro et al.,

2002, Griffin and Hepburn, 2005). As for the indirect effect of perceived reciprocity on commitment, the findings demonstrated that the principles of Equity Theory can be applied in the sharing economy context. In line with the theory, any inconsistency between expected and perceived outcome may induce stress and psychological and physical responses aimed at coping with stress. The reduction of stress increases the likelihood of a positive behavioural outcome (Walster et al., 1973, Adams, 1963, Biron and De Reuver, 2013). The findings of this thesis add to the literature on the outcomes of equity perception by theorising the effect of reciprocity evaluation on commitment through problem-focused and emotion-focused coping. Specifically, the examination of the paths showed the positive effect of reciprocity perception on problem-focused coping, which, in turn, positively correlates with commitment. The effect of the reciprocity on problem-focused coping is stronger compared to its direct effect on commitment. The findings demonstrate that commitment is not always secured by a mere reciprocation of exchange. People may undertake effective measures, such as adjusting behaviour or the environment, to ensure that future transactions bring fair returns. In a similar vein, the significant strong effect of reciprocity on emotion-focused coping suggests that sharing economy users resort to emotional adjustment following the evaluation of reciprocity. The results of path analysis by controlling for socio-demographic variables demonstrated that emotion-focused coping following reciprocity evaluation is more typical for women, while problem-focused coping is more common for men. These results can be explained by the evidence from prior research arguing that women and men have different responses to distressing situations. Such situations stimulate men towards active behaviour to elevate their mood, while women focus on thinking about the problem (McQueeney et al., 1997). Although the negative effect of emotion-focused coping on the commitment to sharing economy platforms was insignificant, the finding supports the assumption that the regulation of emotions is counter-effective in maintaining behaviour (Strutton and Lumpkin, 1994).

6.2.3. Moderation effects

The results of the moderation analysis suggest that procedural justice has an effect on the perception of reciprocity only if the outcome of exchange represents low utility for sharing economy users. This result is consistent with assumptions based on the prior literature (Hoffman and Spitzer, 1985), confirming the correlation of utilitarian value and distributive justice (vs

procedural justice) and the mediating role of intrinsic motivation in the relationship between procedural justice and behavioural performance. This finding provides missing evidence about the moderating influence of hedonic value on the effect of procedural justice. Also, the confirmed effect explains the scenarios and situations when collaborative relations most likely end up in positive evaluation. The effect of utilitarian value on the relationships between outcome variables indicates that a stronger utilitarian value of outcomes increases the likelihood of regulating emotions as a mean of coping with the unfair allocation of rewards. Given the insignificant relationship between emotion-focused coping and commitment and the established moderating effect of utilitarian value, people who perceive a high utility of relations are more likely to stop using platforms to avoid nonreciprocal outcomes in future transactions. The established moderating role of hedonic value was found to be negative, which is consistent with the assumption suggested by the prior research (Jones et al., 2006). However, the difference in effect sizes between the two groups of respondents (weak hedonic value vs strong hedonic value) is very minimal, which means that the inhibiting role of hedonic value on the relationship between reciprocity perception and emotion-focused coping is very weak. The effect of reciprocity on problem-focused coping and the commitment to sharing economy platforms is conditioned by the perception of the low hedonic outcome of relations. These findings add to the existing literature, which only tested the direct effects of value on loyalty, intention to continuous behaviour and affective state (Jones et al., 2006, Park and Ha, 2016). The results of the moderating analysis provide information about situational conditions that explain the variability of the behaviour of people following reciprocity evaluation. Finally, the insignificant effect of hedonic value on the path between procedural justice and reciprocity perception means that the fairness of procedures in the sharing economy is evaluated irrespective of the degree to which relations bring hedonic benefits.

The confirmed moderation effects of social influence, self-efficacy and response efficacy are in line with prior research (Long, 1989, Liang and Xue, 2009, Johnston and Warkentin, 2010) suggesting that the constructs determine individuals' behaviour in stressful situations and intention to engage in activity mitigating stress (Johnston and Warkentin, 2010). Specifically, the results of the moderation analysis suggest three main conclusions. First, people emotionally and pro-actively cope with stress when they believe in personal capability to readdress the stress, when they expect coping behaviour to bring effective results and when they are under the

influence of social groups. Second, there is more probability that after pro-active coping with stress, people will commit to sharing economy communities if they have a strong belief in the effectiveness of coping measures. This finding is consistent with prior evidence (Rippetoe and Rogers, 1987, Johnston and Warkentin, 2010) supporting the idea that response efficacy has a stimulating effect on adaptive behaviour. Third, problem-focused coping results in relationship commitment irrespective of the strength of perceived social influence and self-efficacy. Although these results are not consistent with the initial assumption of the study rooted in prior literature (Liang and Xue, 2009, Han et al., 2016, Floyd et al., 2000), the insignificant effects are logical. By undertaking measures to cope with the consequences of unfair relations, people handle the social pressure and improve their self-concept. That makes these variables not important for further behaviour. The above findings provided new evidence to the literature on consumer behaviour in the sharing economy (Harvey et al., 2020) following reciprocity evaluation and enriched the body of research focusing on coping behaviours (Strutton and Lumpkin, 1994, Folkman et al., 1986).

6.3. Overall Discussion

The examination of the two research models has addressed three objectives of the thesis aimed at providing evidence on different stages of consumer behaviour in the sharing economy. The first objective concerned social and psychological underpinnings and implications of compensated and non-compensated collaborations in the sharing economy. In line with the objective, the thesis examined the degree to which the factors of social exchange facilitate or inhibit the participation in the sharing economy, as well as the degree to which the participation resulted in the perception of better quality of life. The relationships between three groups of social factors (i.e. the factors of social capital, expected reciprocity, perceived social value), use behaviour and perceived outcomes (i.e. social inclusion and subjective wellbeing) were tested to answer the research questions. While the effects of expected reciprocity and social value were confirmed, only two out of six social capital factors were significant. The findings demonstrated that the principles of the Social Exchange Theory are successful in explaining the behaviour of sharing economy participants, while the role of social capital factors is rather weak in the given context. The explanatory power of Social Exchange theory is not surprising considering the prior research which successfully validated the theory's utility in different contexts (Cropanzano et al., 2002,

Huang et al., 2016, Liu et al., 2016). The success of the theory is owing to its broad conceptualisation of social relations, which can be applied across a number of disciplines, including social psychology, management and anthropology (Cropanzano and Mitchell, 2005). The main principle of the theory postulates that social exchange relations represent sequential transactions between parties guided by the norm of reciprocity (Blau, 1964, Mitchell et al., 2012). The reciprocation can be dependent on the relationships between the parties and personal norms (Blau, 1964, Hamon and Bull, 2016). A number of prior studies focused mostly on the reciprocity norm, by examining how the expectation of benefits against the risk of having nonreciprocal exchange drives relations (Cropanzano et al., 2002, Huang et al., 2016). In contrast, this thesis tested not only the effect of reciprocity norm, but the role of values and social capital factors defining the nature and structure of relations with other parties. The inclusion of those variables gave a richer insight into the motives and expectations which people hold prior to embarking on collaborations.

As a result of the hypothesis testing, only relational social capital factors (i.e. identification, reciprocity norm and egoistic belief) and social value were found to be significant, whereas the effect of identification was negative. The findings indicated that the participation is underpinned by neither cognitive association nor physical bonds with other parties of platforms. This is not consistent with other studies supporting the role of structural and cognitive social capital in exchange relations (Tsai and Ghoshal, 1998, Wasko and Faraj, 2005). The findings offer two possible explanations. First, the strength of egocentrism and focus on personal outcome maximisation may undermine the creation of dense and close networks united by common interests. Social structures with strong bonding ties, a sense of belonging and shared vision create social liability, which restricts the economic and entrepreneurial potential of relations (Pillai et al., 2017, Weber and Weber, 2011). Strong engagement with existing social networks impedes the development of new potentially benefiting connections and the diversification of resources (Pillai et al., 2017, Locke et al., 1999). Hence, the insignificant effect of bonding social ties, shared vision and the negative effect of identification may be due to the individuals' desire to maximise the entrepreneurial/market potential of collaborations by avoiding socially binding conditions and the homogeneity of relations. The second interpretation could be that relational social capital has a stronger role in strategic outcomes, which could be in the interest of sharing economy participants. Strategic goals are more likely to be sustained by collaborative rather than

transactional relations (Villena et al., 2011). The findings inform the literature, where evidence about the negative role of social capital is outnumbered by the findings on the facilitating role of relational, structural and cognitive social capital in relations (Wasko and Faraj, 2005, Tsai and Ghoshal, 1998, Ferrari, 2016). In addition, the findings provide evidence confirming that the motives of people participating in the sharing economy have a more rational and economic nature.

Against the backdrop of the positive role of reciprocity, social value and egoistic belief, the positive effect of sharing practices on the user-perceived wellbeing and social inclusion is logical. Social inclusion and subjective wellbeing measure the degree to which people meet the benefits at social, economic, legal and interpersonal levels (Huxley et al., 2012). That means that people's rewards reflect the self-centred motives for collaboration aiming to improve ones' standards of living. In addition, social inclusion might be the result of the insignificant effect of bonding social ties. The assumption is drawn from the literature suggesting that unlike bridging ties, bonding ties intensify relations, which may contribute to the social exclusion (Putnam, 1995). That leads us to conclude that by not restricting oneself to an existing social network, individuals are more likely to diversify relations and receive wider opportunities. Such opportunities are more likely to be experienced by the participants of a younger age and who have greater exposure to those platforms. Overall, the analysis of social and psychological determinants and outcomes of the participation in the sharing economy suggest that the behaviour of people reflects an economic, rather than a communal practice, as portrayed in the majority of prior studies (Ferrari, 2017, Whitham and Clarke, 2016).

Another objective of the thesis was to examine the determinants of perceived reciprocity. To address this objective, the research model was developed based on the Equity Theory framework. The model gave information as to how reciprocity is evaluated in the context when people are confronted with the choice to maximise benefits for oneself or the community. To address the objective, the model integrated three groups of factors: social, justice and personality ones. Social factors included social identity and social comparison. Justice perception was measured by distributive and procedural justice. Individuals' personality was captured by equity sensitivity and predisposition towards maximisation. The results of the hypothesis testing confirmed that perceived reciprocity is positively influenced by social identity, ingroup comparison, procedural

justice and personal predisposition to maximise outcomes. The role of distributive justice was not supported, while procedural justice was only significant for people expecting a low utilitarian value of exchange. This finding contradicts the majority of the literature postulating the importance of justice in social exchange relations (Chan and Lai, 2017, Chiu et al., 2007, Piccoli and De Witte, 2015). The partial support for the role of justice in relations is surprising, especially considering the supported relationship between the tendency to maximise outcomes and reciprocity evaluation. The effect indicates that the evaluation of reciprocity is dependent on the meticulous analysis of alternatives to achieve the most rewarding outcomes (Iyengar et al., 2006, Schwartz, 2004). It can be concluded that the prominence of justice was offset due to the high contingency of sharing transactions on services and interactional aspects, which make the evaluation of the fairness of distributed rewards complicated. The lack of concrete indication of rewards affects the clarity of judgment, thus making the justice perception weaker (Conlon et al., 1989). In addition, the effect of justice perceptions is downplayed against the significant and moderate effect of ingroup comparison and the confirmed effect of social identity. The significance of those factors implies that the identification with the group cast subjectivity on the judgment of relational outcomes (Tajfel, 1974, Tavares et al., 2016). Considering that social identity contributes to the selection of reference people for the comparison of inputs and outputs of relaitons (Anthony, 2005), it can be inferred that social orientation within sharing economy communities has a primary effect on reciprocity perception. Therefore, the reciprocity evaluation in sharing economy transactions is mostly contingent on the degree to which people associate themselves with the community, which determines the favourable attitude toward the behaviour of another party of the transaction. The findings denote that to understand reciprocity perception in the sharing economy the effect of rational judgement (justice perceptions) needs to be considered in association with social and personality factors.

The third objective was to examine the cognitive and behavioural outcomes of perceived reciprocity. To understand the behaviour of people caused by the inconsistency between expected and received rewards, the research model theorised the direct and the indirect effect of reciprocity on commitment through coping behaviours. The emotion-focused and problem-focused coping mechanisms were explored to understand the behavioural responses to perceived reciprocity. In addition, the moderation effects were tested to explore how personal and situational factors affect the strength of perceived reciprocity and subsequent cognitive and behavioural outcomes. All the

hypothesised relationships were confirmed except for the effect of emotion-focused coping on commitment. Compared to the direct effect of reciprocity on commitment, the effects on coping mechanisms were stronger. That indicated that even though people perceive the outcomes of relations to be fair, they may not be as expected, which triggers stress and the need for physical or emotional coping (Walster et al., 1973, Adams, 1963, Biron and De Reuver, 2013). Individuals may use pro-active measures or emotional distancing to cope with stress (Lazarus, 1998). By engaging in problem-focused coping the partners of exchange undertake measures to compensate to the other party in the transactions for the lack of reciprocity. Emotion-focused coping refers to the cognitive and behavioural activities aimed at eliminating negative emotion, without affecting the problem causing those emotions (Folkman et al., 1986). The paths between perceived reciprocity and both coping mechanisms were stronger for people who have a strong utilitarian value (vs hedonic value) of exchange, strong response efficacy, self-efficacy and social influence. That means that the utility of rewards, the influence of the social group and the belief in having capabilities and resources to cope with stress stimulate stress regulation mechanisms (Long, 1989, Liang and Xue, 2009, Johnston and Warkentin, 2010). Overall, the established relationships between outcome variables and the results of moderation analysis suggest three scenarios of users' behaviour. First, sharing economy users grow committed to sharing platforms after evaluating the reciprocity of exchange. Second, the evaluation of reciprocity triggers the engagement in problem-focused behaviour, which helps reduce stress, leading to relational commitment. Third, when people engage in emotion-focused coping after reciprocity evaluation, they feel less attachment and commitment to sharing economy communities.

7. Conclusion

The thesis has pursued four objectives, which were addressed by conducting a systematic literature review and two surveys. The systematic literature review made it possible to analyse resources and their implications, practices of consumption, user motives, the expected and actual outcomes of collaborations in the sharing economy. Those topics were covered from the economic, social and technological perspectives. The outcomes of the synthesis of the streams of the literature were three-fold. First, it helped build a holistic picture of the sharing economy by capturing divergent aspects found in different streams. Second, the review enabled the researchers to identify themes and concepts which are well-researched and the areas of the research requiring further investigation. Finally, the gaps identified provided the ground for the development of the research models examined in this thesis.

In the first survey, the psychological and social antecedents and outcomes of the use of the sharing economy were explored. The research model for the survey was drawn on Social Exchange Theory and the Social Capital Framework. Social Exchange Theory informed the researchers about the selection of the variables determining use behaviour. The use of the framework on social capital factors provided a comprehensive set of the facilitators of social exchange driving individuals' motivation. The survey employed users of sharing economy platforms to measure the relationships between the antecedents and the outcomes of use behaviour. The analysis of the research model demonstrated that out of ten hypotheses, six were found significant. The findings made it possible to conclude that the use of sharing economy platforms is preconditioned by the small but negative effect of identification and the positive effects of reciprocity norm, egoistic belief and social value. The strongest determinant of behaviour was found to be social value, suggesting the need for social benefits (e.g. favourable social image, the fulfilment of personal needs and social interaction). The significance of the norm of reciprocity indicates that individuals embark on relations due to the belief that platforms provide mutual benefits and whenever the exchange occurs it will be reciprocated. The supported effect of egoistic motive reflects the selfish desire to satisfy one's own needs when using sharing economy platforms, irrespective of the environmental consequences that their use might incur. The effects of shared vision, social ties, altruistic and biospheric beliefs were not supported. Also,

the findings of the research model provided first-hand data about the impact of sharing economy platforms on the user's life. The research found a significant correlation between use behaviour and social inclusion. This correlation means that users think that the sharing economy helped secure sustained benefits, in terms of the integration with the society at the social, legal, economic and interpersonal levels. The research also found a strong effect of use behaviour on subjective well-being, meaning that collaborations through sharing economy platforms led to a heightened perception of overall life satisfaction. The likelihood of perceived outcomes is stronger for younger users and those who use platforms more frequently and intensively.

The second survey was conducted to examine the determinants of perceived reciprocity and the commitment to the sharing economy. The thesis adopted the Equity Theory framework and examined the role of social factors explaining the evaluation of reciprocity when individuals are confronted by the choice to behave rationally vs pursue collective benefit maximisation. Based on the analysis of the research model focusing on the sample of sharing economy users, four out of six hypothesised determinants were found to be significant. The main predictors of reciprocity were found to be a strong feeling of social identity and the tendency to compare personal outcomes of relations with the outcomes of other members of sharing economy communities. Also, the thesis found that the reciprocity of relations is the outcome of fair procedures of transactions. The positive evaluation of reciprocity was found to be dependent on the degree to which individuals tend to maximise outcomes. The effects of equity sensitivity and distributive justice were rejected respectively.

To examine the mechanisms contributing to relationship commitment, the survey employed a two-dimensional coping scale, which measures problem-focused and emotion-focused behaviours. Except for the direct effect of reciprocity on the relationship commitment, the research found the indirect effect through problem-focused coping. However, the effect of emotion-focused coping does not translate into relationship commitment. To understand the variance in perceived reciprocity, cognitive and behavioural processes depending on situational and personal factors, the moderation effects of the value of exchange, social influence, response efficacy and self-efficacy were tested. It was confirmed that utilitarian and hedonic values moderate the strength of the effect of procedural justice on perceived reciprocity and regulate the relationship between perceived reciprocity, coping strategies and commitment. The selection of

coping strategies following the evaluation of reciprocity was more likely for users who had high levels of self-efficacy, response efficacy and social influence. Given the moderation effect of social and personal factors, the strongerthe effect of social influence, self-efficacy and response efficacy, the more likely users of platforms try to relieve the consequences of reciprocity evaluation at the emotional or physical levels.

7.1. Theoretical contributions

The findings of the thesis contribute to the literature in four ways. First, the multi-perspective review of the literature contributes to the existing body of knowledge by providing a comprehensive analysis of resources redistributed in the sharing economy, their applications, technical specifications of platforms, user motives, expected and actual outcomes covered in the social, economic and technological streams of the literature. Such an approach is different from prior review papers (Dredge and Gyimóthy, 2015, Cheng, 2016, Cheng and Edwards, 2019), which brings a novel agenda for further research on monetary and non-monetary practices. The multi-perspective analysis of the literature helps identify the emergent themes in the literature and limitations that future research needs to build upon. In the frame of this thesis, the systematic literature review made it possible to identify the gaps to advance research in the domain of consumer behaviour.

The second contribution of the thesis is that it broadens the understanding of the social and psychological underpinnings and implications of sharing economy practices. The findings provide empirical evidence contributing to the literature that have long been debating the role of community-oriented motives in the sharing economic relations, though without providing a comprehensive empirical examination (Ferrari, 2017, Whitham and Clarke, 2016). Guided by the social exchange theory, this thesis validated the significant role of three groups of factors, which are factors facilitating/inhibiting social exchange, expected reciprocity and social values. The positive effect of egoistic beliefs, the expectation that the use of sharing economy platforms would create mutual benefits and social image, challenged the concept of the sharing economy as a community-oriented system. This research takes a further step in explaining the role of individual factors facilitating social exchange pertinent to each dimension of social capital. The adopted approach provides a new insight into the nature of collaborative relations, which goes

against the common and established representation of the sharing economy. The findings demonstrated that social facilitators and pro-environmental underpinnings had an insignificant correlation with use behaviour. However, the significance of social value points to the complex nature of collaborations and sheds light on the reason for the misinterpretation of the social premises of collaborations. This finding demonstrates the importance of delineating social value and social factors, as the former serves a personal agenda rather than a collective role. In addition, the relationships were tested across users of diverse sharing economy segments, in contrast to the previous research, which focused only on users of specific platforms (Priporas et al., 2017, Boateng et al., 2019). Higher external validity widens the implications of the findings and adds value to the research.

The thesis provides the first empirical evidence about the effect of the sharing economy on perceived social inclusion and subjective well-being. The findings enrich the literature with the data about the individual-level impact that the sharing economy has on people's lives, while the majority of the discourse in the literature to date has been about the macro-level changes brought about by the sharing economy (Bonciu and Bâlgar, 2016, Retamal, 2017, Fremstad, 2017, Watanabe et al., 2017, Bachnik, 2016, Mair and Reischauer, 2017, Geissinger et al., 2018). The findings of the research are particularly valuable for the stream of the literature focusing on the implications of online systems for the well-being of society. The results of the analysis of moderation effects provide a better understanding of the user segment, which is most affected by the sharing economy.

The third contribution of the thesis is that it provides insight into the social psychological and personality factors that determine the degree to which relations in the sharing economy are perceived to be fair. The adoption of the equity theory framework enabled to theorise and investigate the correlation between justice perceptions and the personal and social groups of factors on the perception of reciprocity in sharing economy relations. The research confirmed the insignificance of distributive justice and interpreted findings, thus opening a new perspective on the equity theory in the sharing economy context. It was found that the main determinants of reciprocity are strong social identity and the tendency to compare outcomes to other people within the sharing economy community. The analysis of the hypothesised relationships explains collaborations in the context of social dilemma, whereby individuals may pursue both collective

and self-interest. The integration of the variables addressing users' social identity and social comparison mechanisms reconciles the social and rational perspectives on collaborative consumption. In addition, the analysis of the effects of predisposition towards maximisation and equity sensitivity explains the predictive power of personal traits. Given the positive impact of reciprocal relations on collective wellbeing (Laamanen et al., 2015, Llamas and Belk, 2013), an understanding of the determinants of reciprocity is important for securing the positive outcome of relations and, in turn, facilitating the welfare of the society.

Finally, this thesis contributes to the current body of knowledge by explaining the direct and indirect effect of perceived reciprocity on relationship commitment. The examination of emotion-focused and problem-focused coping on following reciprocity perception sheds light on the individuals' behavioural and cognitive responses following reciprocity perception in the sharing economy (Harvey et al., 2014b). The results of the analysis of paths between perceived reciprocity and coping mechanisms give evidence about the factors determining the commitment of people to sharing economy platforms. Those findings shed new light on the application of equity theory. They explain behavioural and cognitive responses that people initiate after reciprocity evaluation in the sharing economy and elucidate how they contribute to the commitment of people to sharing economy platforms. The knowledge that the thesis provides is important considering evidence about the role of commitment in determining people's loyalty to relations (Dagger et al., 2011). The findings help understand what behaviours someone embarks on that may potentially sustain long-term collaborations in platforms.

In addition, this research explains the variance in perceived reciprocity and its consequences in sharing economy transactions depending on situational differences. Particularly, the thesis examined the moderating role of the value of exchange on the direct relationships between equity sensitivity, justice and reciprocity perception, as well as relationships between reciprocity perception, coping and commitment. In addition, the role of social influence, self-efficacy and response efficacy in facilitating and inhibiting behavioural and cognitive responses to perceived reciprocity were explored. Prior studies examined the direct role of those factors in perceiving relational outcomes or underpinning behavioural intention and coping mechanisms (Ha and Park, 2013, Haney and Long, 1995, Lerner and Kennedy, 2000, Liang and Xue, 2009, Johnston and Warkentin, 2010, Floyd et al., 2000). This research extends the application of the factors and

explains the moderating effect they have on the relationship between perceived reciprocity, its determinants and cognitive/behavioural outcomes. An examination of moderation effects is important, as it gives a richer insight into the dependence of reciprocity evaluation and commitment on situational conditions and explains possible variations in the predictive strength of the examined variables.

7.2. Practical implications

From a practice perspective, the examination of the determinants of collaborations in the sharing economy provides insight into the psychological patterns of the sharing economy users. The results suggest the importance of three groups of factors, which can help regulate relations and increase collaborations between supply-side and demand-side users. The significant effect of the reciprocity factor suggetss three possible implications. The finding informs intermediaries (sharing economy platforms) about the importance of developing rules of conduct regulating the conditions of transactions through platforms. Such a regulatory policy should include the type of reward which is expected to be returned, the period within which the exchange should be reciprocated, as well as the obligation of supply-side and demand-side users to rank each other following exchange transactions. Given that some sharing economy platforms operate on a non-commercial basis, the type of return may be of a hedonic nature (e.g. experience, service). The availability of a regulatory tool on platforms can reassure providers and receivers that any misconduct is the subject of liability, which is most likely to satisfy the need for reciprocity. Also, it is important that platforms embed ranking systems in users' profiles, indicating their history of reciprocation. A reciprocity ranking system makes it possible to evaluate the degree to which a user can be trusted. High rankings may promote the profiles of vendors who are on top of the lists and increase views. Also, a ranking system can facilitate the regulation of relations by labelling the most trusted vendors and encouraging collaborations with them. Apart from implications for intermediaries, the significant effect of reciprocity norm advises providers and receivers about the need for building trustworthiness and the reputation of being a reliable partner. This can be done by integrating visual and identification attributes, such as photos, which was found to positively correlate with the perception of trustworthiness (Ert et al., 2016). The second significant factor which needs to be considered in practice is users' egoistic motivation driving exchange relations. Egoistic motivation explains the importance of the reciprocity norm,

indicating users' selfish desires. The third factor is social value, which points to the importance of services that are consistent with users' lifestyles, helps them keep up a socially-favoured image and performs a particular social role. To demonstrate social value, platforms should incorporate communication forums enabling users to share experience and suggestions, which would help address the interests of each member in the network. Such a tool may be integrated in transportation, accommodation clothes swapping, book sharing and other platforms. To offer greater social value to potential exchange partners, users of platforms need to utilsie personalised contact channels and one-to-one communication, which will enable long-term cooperation beyond a one-time transaction.

Evidence about the effect of the use of sharing economy platforms on social inclusion and subjectiev well-being can be useful for policy-makers. Particularly, the strong relationship between use behaviour, social inclusion and subjective well-being signals the societal importance of the sharing economy model of consumption. This thesis equips policy-makers with evidence that can be set against the discussions on potential socio-economic disruptions incurred by the sharing economy. For example, much has been said about the downsides of the sharing economy in terms of licensing, taxation, employee protection, quality standards, as well as the effect on the economy in general (e.g. (Miller, 2016, Sprague, 2015)). In a number of instances, legislation is not yet ready to allow sharing economy platforms to compete in markets. While it is important to recognise regulatory challenges, the potential threats should not overshadow the opportunities that the sharing economy unveils both for consumers and for entrepreneurs. The thesis points to the need for a closer look at the economic initiatives at regional and national levels to put forward an efficient and flexible economy that is built around people's concerns. To facilitate the societal and economic impact of the sharing economy, business incubators and research centres could be created to attract investments and develop start-ups. In addition, the government should develop regulations that would protect consumers' rights without compromising on satisfying their needs. Also, given the positive moderating effect of use frequency and use intensity on the perception of long-term outcomes, the potential of the sharing economy can be fully embraced by redeveloping state procurement frameworks and facilitating the digital inclusion of the population. These would make the marketplace more competitive and give sharing economy providers a wider exposure to the public along with traditional services/goods.

The findings of the effect of justice perception on reciprocity and subsequent outcomes also have implications in practice. On the one hand, the findings provide guidelines about potential interventions that can be developed to ensure higher satisfaction with platforms due to increased reciprocity. The findings indicate that there are three main conditions that need to be met, in order to increase the likelihood of reciprocity in relations. First, users need to associate themselves with other platform members and compare the outcomes of relations with other peers. To strengthen the feeling of belonging to sharing economy communities, platforms need to facilitate the communication and interaction of users with platforms and with other members. A possible way to make the communication more effective is to analyse users' orders and search patterns, identify their interest and build the communication and interaction around their preferences. Such an approach would be possible for platforms with customisable multicriteria search tools, such as accommodation or product-swapping. For example, a search for a particular type of house would make it possible to identify the preference in size, budget, location and interior and provide weekly updates with targeted offerings. Apart from strengthening social identity, targeted promotions simplify the evaluation of options, which is important for users with a tendency to maximise outcomes. The finding of the significant effect of procedural justice on reciprocity perception provides another implication for practice. Against the insignificant effect of distributive justice, the positive effect of procedural justice suggests that all parties of transactions should focus more on the clarity of procedures and the compliance with the policies of transactions, rather than the final outcome. To increase the perception of the fairness of procedures, platforms should also imply the liability for any unfair treatment in exchange relations between the two parties.

On the other hand, the findings of the thesis inform practitioners on how to ensure the loyalty of the users of sharing economy platforms. As perceived reciprocity is an important predictor of relationship commitment, the intermediaries of transactions (i.e. platforms) need to develop a clear policy on the reciprocation terms and conditions. This would help in the exchange of rewards that are difficult to measure and monetise. In addition, the confirmed effect of problem-focused coping on commitment suggests that receivers and suppliers on platforms may offer feedback strategies that would compensate for an insufficient degree of perceived reciprocity. The potential measures can include online blogs and communities discussing concerns and issues

that users face in the exchange with each other. The interaction with other members of the community would help find a solution to a problem or inform about potential ways of dealing with the lack of reciprocation. Such an approach ensures a stronger perception of procedural justice, by demonstrating the transparency of procedures and communication within platforms, as well as the empathy towards users.

7.3. Limitations and Future Research Suggestions

The findings drawn from the first survey should be considered against the limitations resulting from the research design choices made. First, the cross-sectional nature of the research does not fully explain the causal effect of social factors on use behaviour. Although the behaviour – outcome relationship was moderated by use frequency/intensity, collection of data at several points in time would give a higher control over the dynamics in perceived well-being and social inclusion throughout usage of the platforms. Secondly, the insignificant and weak effects of some social capital factors on use behaviour suggest examining monetary and utilitarian factors, which would complement the findings of this research from the vantage point of economic transactions. Future research could potentially test the effect of value for money, price perception and price sensitivity on users' behaviour. Thirdly, the responses were collected in the US. It would be useful to test the model in countries with a developing economy and a collective society with a different hierarchy of values, norms and beliefs, which could affect intentions and behaviour (Li et al., 2018). Fourthly, control for the type of practice and platforms could offer insights into the motives of user clusters engaged in commercial versus non-commercial transactions, and compare behavioural patterns in different sharing segments (accommodation, transportation, etc.). Fifthly, given that this survey focused only on current users of sharing economy platforms, it is not possible to assess to what degree the motivations of people to use platforms differs compared to non-users. Future studies need to differentiate the effect of social capital factors, social value and reciprocity norm on use behaviour by examining and comparing three user segments – long-term users, non-users and people who have started using platforms recently. Finally, the COVID-19 pandemic is likely to moderate the predicted strength of social value in consumer behaviour, due to current restrictions on social interaction. Hence, a re-examination of the effect of social factors is needed during and after the pandemic. Also, while this thesis offers evidence about the effect of collaborative practices on social inclusion and subjective wellbeing,

future studies need to revisit the impact given the social isolation measures that are taking place. It is important to consider moderating factors when examining user perceived outcomes. For example, the perception of social inclusion can differ depending on the type of platform, as certain forms of user practice have been particularly affected by the coronavirus outbreak, such as social dining and indoor entertainment.

As far as the determinants and cognitive/behavioural outcomes of perceived reciprocity are concerned, future research can build upon the several limitations that the research had. Given the cross-sectional design of the study, the antecedents and outcomes of reciprocity perception were not tested longitudinally. Testing the research model at several points in time would give a more robust explanation of the causal effect of the selected variables. Secondly, the thesis did not control for the effect of the type of relationship. Future studies need to check whether the effect varies depending on the monetary or non-monetary rewards, by splitting the sample into two clusters – those who exchange resources for monetary compensation (e.g. paid accommodation sharing, carsharing and clothes exchange) or those who exchange for free and other compensation (e.g. exchange of services or gifts). Different samples may prioritise different aspects of relations, such as the quality of interaction, communication, service or products. Different priorities can affect the strength of the distributive and procedural justice perception and determine the outcomes of reciprocal behaviour. Thirdly, future studies may go further and check the effect of experiential or rational decision making on the evaluation of the outcomes of collaborative relations. This would help explain the role of decision-making factors in the reciprocity evaluation. Finally, future research needs to test the model, as the pandemic has strengthened health-protective behaviour and changed attitudes to sharing. With the introduction of social distancing measures and the reduction of collaborative practices, the perception of social identity, justice and equity might have changed, precipitating changes in coping behaviour and commitment. By re-examining the determinants and consequences of perceived reciprocity, it would be possible to compare the changes in consumer behaviour before and after the pandemic.

8. Appendices

8.1. Questionnaire for Research Model 1

The Sharing Economy Acceptance Questionnaire

Welcome to the Sharing Economy Acceptance Survey! The sharing economy is a socio-economic system that makes it possible to collaboratively consume goods and services for free or for compensation. The sharing economy has been enabled by online sharing intermediaries. Among those are car-sharing providers (e.g. Uber, Lyft and Zipcar), peer-to-peer apartment sharing platforms (e.g. AirBnb and Couchsurfing), freelancing systems (e.g. TaskRabbit), lending platforms (e.g. Crowdfunding and Lend Club), online product listings (e.g. Neighbourgoods and Craigslists), to name a few. The aim of the research is to study the factors and conditions driving users' decision to engage in collaborative consumption through sharing platforms. We would like to invite you to participate in this study by completing the survey.

- The questions may be of personal nature.
- Be assured that all answers you provide will be kept confidential.
- Any information provided will be used solely for the purpose of this research.
- It is very important that you provide answers to all questions.
- Please provide answers that suit your circumstances best.

The survey will take approx. 20 minutes. This project is undertaken by D. Davlembayeva, Prof. S. Papagiannidis and Dr. E. Alamanos

If you have any questions, please feel free to contact us at D.Davlembayeva2@newcastle.ac.uk

SCREENING QUESTION

Please indicate if you use or you have used sharing economy platforms in the past, by selecting all applicable options from the list below?

- ☐ Carsharing services (e.g. Lyft, Uber, Zipcar, Car2Go) (1)
- ☐ Apartment sharing services (e.g. Airbnb, Couchsurfing) (2)
- ☐ Product-service communities (e.g. Peerby, Taskrabbit) (4)
- ☐ Retail platforms (e.g. Bag Borrow and Steal) (5)
- ☐ Peer-to-peer lending platforms (e.g. Crowdfunder, Lend Club) (6)
- ☐ Coworking spaces (e.g. We Work) (7)
- ☐ None of the above (11)

DEMOGRAPHICS

In this section you will be asked to answer general questions about you (age, gender, employment status, education etc.)

Q1 What is your gender?

- ○ Male (1)
- ○ Female (2)

Q2 How old are you?

- ○ under 20 (6)
- ○ 20 - 29 (1)
- ○ 30 - 39 (2)
- ○ 40 -49 (3)
- ○ 50 - 59 (4)
- ○ Over 60 (5)

Q3 What is your current employment status?

- ○ Full time employed (1)
- ○ Part time employed (2)
- ○ Out of work (but looking for) (3)
- ○ Out of work (but not looking for) (4)
- ○ Homemaker (5)
- ○ Student (6)
- ○ Retired (7)
- ○ Unable to work (8)

Q4 What is your ethnicity?

- ○ Non-Hispanic White or Euro-American (1)
- ○ Black, Afro-Caribbean, or African American (2)
- ○ Latino or Hispanic American (3)
- ○ East Asian or Asian American (4)
- ○ South Asian or Indian American (5)
- ○ Middle Eastern or Arab American (6)
- ○ Native American or Alaskan Native (7)
- ○ Mixed (9)
- ○ Other (8)

Q5 What is the highest level of education you have completed?

- ○ Some high school or less (1)
- ○ High school graduate or equivalent (2)
- ○ Vocational/technical school (two year program) (3)
- ○ Some college, but no degree (4)
- ○ College graduate (four year program) (5)
- ○ Some graduate school, but not degree (6)
- ○ Graduate degree (MSc, MBA, PhD, etc.) (7)
- ○ Professional degree (M.D., J.D., etc.) (8)

Q6 What is your area of residence:

- ○ Urbanized Area (50,000 or more people) (1)
- ○ Urban Cluster (at least 2,500 and less than 50,000 people) (2)
- ○ Rural (all other areas) (3)

Q7 It would be helpful for analysis, to know the income bracket of your household (annual household income before tax).

- ○ $0 - $24,999 (1)
- ○ $25,000 - $49,999 (2)

○ $50,000 - $74,999 (3)

○ $75,000 - $99,999 (4)

○ More than $100,000 (5)

The following questions measure the frequency and intensity of the use of sharing economy platforms.

Q8 Please indicate the frequency of engagement with each of the following types of sharing economy platforms:

	never (1)	**tried, but do not use them now (2)**	**once a year (3)**	**once a month (4)**	**2 to 3 times a month (5)**	**once a week (6)**	**a few times a week (7)**
carsharing services (e.g. Lyft, Uber, Zipcar, Car2Go)	○	○	○	○	○	○	○
apartment sharing services (e.g. Airbnb, Couchsurfing)	○	○	○	○	○	○	○
product-service communities (e.g. Peerby, Taskrabbit)	○	○	○	○	○	○	○
retail platforms (e.g. Bag Borrow and Steal)	○	○	○	○	○	○	○
peer-to-peer lending platforms (e.g. Crowdfunder, Lend Club)	○	○	○	○	○	○	○
coworking spaces (e.g. We Work)	○	○	○	○	○	○	○

Q9 Please indicate the use intensity of the following types of sharing economy platforms:

	non-use (1)	almost never use (2)	use, but not intensively (3)	neutral (4)	slightly intensive use (5)	intensive use (6)	extremely intensive use (7)
carsharing services (e.g. Lyft, Uber, Zipcar, Car2Go)	○	○	○	○	○	○	○
apartment sharing services (e.g. Airbnb, Couchsurfing)	○	○	○	○	○	○	○
product-service communities (e.g. Peerby, Taskrabbit)	○	○	○	○	○	○	○
retail platforms (e.g. Bag Borrow and Steal)	○	○	○	○	○	○	○
peer-to-peer lending platforms (e.g. Crowdfunder, Lend Club)	○	○	○	○	○	○	○
coworking spaces (e.g. We Work)	○	○	○	○	○	○	○

MAIN CONSTRUCTS

Questions in this section are about the nature and the strength of relationships with other users of sharing economy platforms, your perception of the degree of trustworthiness of transactions, opinion about the rules of participation, the goals of the communities of platform users, and your environmental beliefs.

Q10 Please select the options that apply to each of the statements below, considering sharing economy platforms that you use:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I maintain close social relationships with some users	○	○	○	○	○	○	○
I spend a lot of time engaging in social interactions with some users	○	○	○	○	○	○	○
I know some users on a personal level	○	○	○	○	○	○	○
Apart from transactions, I have frequent communication with some users	○	○	○	○	○	○	○

Q11 Please select the options that apply to each of the statements below, considering sharing economy platforms that you use:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I share the same ambitions and vision with other users	○	○	○	○	○	○	○
I am enthusiastic about pursuing the collective goals and missions of platforms	○	○	○	○	○	○	○
Users have the same purpose of using the platforms	○	○	○	○	○	○	○

Users are committed to the goals of the platforms	○	○	○	○	○	○	○
Users view themselves as partners in charting the direction of the platforms	○	○	○	○	○	○	○
All users are in total agreement with the vision of the platforms	○	○	○	○	○	○	○

Q12 Please select the options that apply to each of the statements below, considering user communities of sharing economy platforms that you use:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I feel a sense of belonging toward communities	○	○	○	○	○	○	○
I have the feeling of togetherness or closeness in communities	○	○	○	○	○	○	○
I have a strong positive feeling toward communities	○	○	○	○	○	○	○
Users behave in a consistent manner	○	○	○	○	○	○	○
I am proud to be the member of communities	○	○	○	○	○	○	○

13 Please select the options that apply to each of the statements below, considering sharing economy platforms that you use:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I know that other users will help me, so it's only fair to help users of platforms	○	○	○	○	○	○	○
I trust that some users would help me if I were	○	○	○	○	○	○	○

in a similar situation							
It is fair to help other users when they want help with the service/product-related inquiry	○	○	○	○	○	○	○
I believe that the benefits I give to other users will be reciprocated	○	○	○	○	○	○	○

Q14 Please read below and select the options that apply to each of the statements:
My use of sharing economy platforms is motivated by the beliefs that ...

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
Pollution harms people all over the earth	○	○	○	○	○	○	○
We don't need to worry about the environment because future generations will be able to deal with these problems better than we are now	○	○	○	○	○	○	○
The effects of pollution on public health are worse than we realise	○	○	○	○	○	○	○
Environmental protection will help people have a better quality of life	○	○	○	○	○	○	○
Environmental protection benefits everyone	○	○	○	○	○	○	○
A clean environment provides me with better opportunities for recreation	○	○	○	○	○	○	○
Protecting the environment will threaten jobs for people like me	○	○	○	○	○	○	○
Laws to protect the environment limit my choices and personal freedom	○	○	○	○	○	○	○

Environmental protection is beneficial to my health	○	○	○	○	○	○	○
Modern development threatens wildlife	○	○	○	○	○	○	○
Over the next several decades, thousands of species of plants and animals will become extinct	○	○	○	○	○	○	○
Claims that we are changing the climate are exaggerated	○	○	○	○	○	○	○
While some local plants and animals may have been harmed by environmental degradation, over the whole earth there has been little effect	○	○	○	○	○	○	○

The following questions focus on the values that drive your participation on sharing economy platforms

Q17 Please read below and select the options that apply to each of the statements:

When using sharing economy platforms …

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
Patronising platforms creates an image that I want to help others	○	○	○	○	○	○	○
I am eager to tell my friends/acquaintances about platforms	○	○	○	○	○	○	○
I feel that I belong to the user segment of platforms	○	○	○	○	○	○	○
I find products/services that are consistent with my style	○	○	○	○	○	○	○
I feel like a smart user, because I make successful acquisition/distribution of products/services on	○	○	○	○	○	○	○

platforms							
It gives me something that is personally important or pleasing for me	○	○	○	○	○	○	○

This section concerns the use behaviour and outcomes of engaging in the sharing economy in terms of a) overall satisfaction with sharing economy platforms; b) well-being (the perception of own happiness based on the degree of your satisfaction with life) and c) social inclusion (the access to social, cultural and economic resources to enjoy living standards that are commonly accepted as normal).

Q18 Please select the option that applies to each of the statements below, considering sharing economy platforms:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neutral (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I would have no difficulty telling others about the results of using platforms	○	○	○	○	○	○	○
I believe I could communicate to others the consequence of using platforms	○	○	○	○	○	○	○
The results of using platforms are apparent to me	○	○	○	○	○	○	○
I would have no difficulty explaining why platforms may or may not be beneficial	○	○	○	○	○	○	○

Q19 Please read below and select the options that apply to each of the statements:

The engagement with sharing economy platforms makes it possible to...

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
Lead a purposeful and meaningful life	○	○	○	○	○	○	○
Have supportive and rewarding social relations	○	○	○	○	○	○	○
Make my daily activities engaging and interesting	○	○	○	○	○	○	○
Contribute to the happiness and well-being of others	○	○	○	○	○	○	○
Be competent and capable in the activities that are important to me	○	○	○	○	○	○	○
Be a good person and live a good life	○	○	○	○	○	○	○
Be optimistic about my future	○	○	○	○	○	○	○
Be respected by other people	○	○	○	○	○	○	○

Q20 Please select the options that apply to each of the statements below, considering sharing economy platforms that you use:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
Platforms satisfy my overall consumption needs	○	○	○	○	○	○	○
Platforms play a very important role in my social well-being	○	○	○	○	○	○	○
Platforms play a very important role in my leisure well-being	○	○	○	○	○	○	○
Platforms play a very important role in enhancing the quality of my life	○	○	○	○	○	○	○

Q21 Please select the option that applies to the statement below:

Overall, how do you feel about the extent to which the use of sharing economy platforms improves your inclusion in society?

- ○ terrible (1)
- ○ displeased (2)
- ○ mostly dissatisfied (3)
- ○ mixed feelings (4)
- ○ mostly satisfied (5)
- ○ pleased (6)
- ○ delighted (7)

Q22 Please select the options that apply to each of the statements below:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I have enough money for food	○	○	○	○	○	○	○
I have an affordable home	○	○	○	○	○	○	○
I have access to childcare and general care facilities	○	○	○	○	○	○	○
I am able to obtain credit	○	○	○	○	○	○	○
I have access to public services	○	○	○	○	○	○	○
I have access to health care	○	○	○	○	○	○	○
I can get medical help immediately if required	○	○	○	○	○	○	○
I am able to afford transport costs	○	○	○	○	○	○	○
I have access to community facilities	○	○	○	○	○	○	○
I am economically active	○	○	○	○	○	○	○
I have access to financial services	○	○	○	○	○	○	○
I have access to educational opportunities	○	○	○	○	○	○	○
I have access to transportation	○	○	○	○	○	○	○

8.2. Questionnaire for Research Model 2

Welcome to the Survey!

A sharing economy is a socio-economic system that promotes collaborative activities of acquiring, distributing and sharing goods and services for free or for compensation. Those activities have been enabled by online sharing platforms, such as transportation (e.g. Uber, Lyft and Zipcar), accommodation sharing platforms (e.g. AirBnb and Couchsurfing), knowledge and talent sharing systems (e.g. TaskRabbit), lending platforms (e.g. Crowdfunding and Lend Club) and online product listings (e.g. Neighbourgoods and Craigslists).

The study will explore the perception of the reciprocity in supplier-provider relations enabled by sharing economy platforms. We would like to invite you to participate in this study by completing the survey.

- The questions may be of personal nature.
- Be assured that all answers you provide will be kept confidential.
- Any information provided will be used solely for the purpose of this research.
- It is very important that you provide answers to all questions.
- Please provide answers that suit your circumstances best.
- The survey will take approx. 15 minutes.

This project is undertaken by D. Davlembayeva, Prof. S. Papagiannidis and Dr. E. Alamanos
If you have any questions, please feel free to contact us at D.Davlembayeva2@newcastle.ac.uk

USE OF SHARING ECONOMY PLATFORMS

Q1. The following questions aim to indicate the degree to which you use monetary-based and nonmonetary-based sharing economy platforms.

Monetary-based platforms enable the exchange of goods and services for payment that can be fixed or negotiated and should be returned immediately to the providing party. Nonmonetary-based platforms relate to any practice that can be either free (like gifts) or provided in exchange of nonmonetary compensation (like service barter, product swap).

Please indicate whether you use sharing economy platforms as a recipient or a provider of goods and services:

- ○ Yes (1)
- ○ No (2)

Q2 Please define whether you use sharing economy platforms as...

- ○ a recipient of goods and services (2)
- ○ a provider of goods and services (1)
- ○ both a provider and a recipient (3)

Q3 Please indicate how often you obtain products or services through the following sharing economy platforms:

	never (1)	tried, but do not use them now (2)	once a year (3)	once a month (4)	2 to 3 times a month (5)	once a week (6)	a few times a week (7)	every day (8)
Monetary-based accommodation sharing (e.g. Airbnb, HomeAway)	○	○	○	○	○	○	○	○
Monetary-based access to clothing, accessories and toys (e.g. Rent the Runway, DesignerShare, BabyQuip)	○	○	○	○	○	○	○	○
Monetary-based transportation (e.g. Uber, Lyft, Gett, Zimride)	○	○	○	○	○	○	○	○
Monetary-based childcare, petcare, babysitting and caregiving (e.g. Care.com, UrbanSitter, Bubble, DogVacay, Rover)	○	○	○	○	○	○	○	○
Monetary-based access to everyday items, equipment and household goods (e.g. Fat Llama, GoShare, Dolly, Zilok)	○	○	○	○	○	○	○	○
Monetary-based rent of space (e.g. Just Park, Peerspace)	○	○	○	○	○	○	○	○
Monetary-based knowledge and talent sharing (e.g. TaskRabbit, Zaarly, Upwork)	○	○	○	○	○	○	○	○
Finance (e.g. CrowdCube. Kickstarter, Sofi, Lending Club)	○	○	○	○	○	○	○	○
Monetary-based experience sharing (e.g. Vayable, EatWith)	○	○	○	○	○	○	○	○
Monetary-based books exchange (e.g. PaperBack Swap)	○	○	○	○	○	○	○	○
Nonmonetary-based accommodation (e.g. Couchsurfing, GuesttoGuest, HomeExchange)	○	○	○	○	○	○	○	○

Nonmonetary-based access to clothing, baby equipment and accessories (e.g. Outdress)	○	○	○	○	○	○	○	○
Nonmonetary-based access to everyday items and household goods (e.g. Freecycle, Freegle)	○	○	○	○	○	○	○	○
Gifts exchange (e.g. GiftFlow, Ziilch, Exchango, Freelly)	○	○	○	○	○	○	○	○
Nonmonetary-based rent of space (e.g. Shared Earth, YardShare)	○	○	○	○	○	○	○	○
Nonmonetary-based knowledge and talent sharing (e.g. TimeBank, free skills provision through StreetBank)	○	○	○	○	○	○	○	○
Nonmonetary-based books exchange (e.g. BookMooch, BookCrossing)	○	○	○	○	○	○	○	○

Q4 Please indicate how often you provide products or services through the following sharing economy platforms:

	never (1)	tried, but do not use them now (2)	once a year (3)	once a month (4)	2 to 3 times a month (5)	once a week (6)	a few times a week (7)	every day (8)
Monetary-based accommodation sharing (e.g. Airbnb, HomeAway)	○	○	○	○	○	○	○	○
Monetary-based access to clothing, accessories and toys (e.g. Rent the Runway, DesignerShare, BabyQuip)	○	○	○	○	○	○	○	○
Monetary-based transportation (e.g. Uber, Lyft, Gett, Zimride)	○	○	○	○	○	○	○	○
Monetary-based childcare, petcare, babysitting and caregiving (e.g. Care.com, UrbanSitter, Bubble, DogVacay, Rover)	○	○	○	○	○	○	○	○
Monetary-based access to everyday items, equipment and household goods (e.g. Fat Llama, GoShare, Dolly, Zilok)	○	○	○	○	○	○	○	○
Monetary-based rent of space (e.g. Just Park, Peerspace)	○	○	○	○	○	○	○	○
Monetary-based knowledge and talent sharing (e.g. TaskRabbit, Zaarly, Upwork)	○	○	○	○	○	○	○	○
Finance (e.g. CrowdCube. Kickstarter, Sofi, Lending Club)	○	○	○	○	○	○	○	○
Monetary-based experience sharing (e.g. Vayable, EatWith)	○	○	○	○	○	○	○	○
Monetary-based books exchange (e.g. PaperBack Swap)	○	○	○	○	○	○	○	○
Nonmonetary-based accommodation (e.g. Couchsurfing, GuesttoGuest, HomeExchange)	○	○	○	○	○	○	○	○

Nonmonetary-based access to clothing, baby equipment and accessories (e.g. Outdress)	○	○	○	○	○	○	○	○
Nonmonetary-based access to everyday items and household goods (e.g. Freecycle, Freegle)	○	○	○	○	○	○	○	○
Gifts exchange (e.g. GiftFlow, Ziilch, Exchango, Freelly)	○	○	○	○	○	○	○	○
Nonmonetary-based rent of space (e.g. Shared Earth, YardShare)	○	○	○	○	○	○	○	○
Nonmonetary-based knowledge and talent sharing (e.g. TimeBank, free skills provision through StreetBank)	○	○	○	○	○	○	○	○
Nonmonetary-based books exchange (e.g. BookMooch, BookCrossing)	○	○	○	○	○	○	○	○

Q5 Please indicate how often you provide and obtain products or services through the following sharing economy platforms:

	never (1)	tried, but do not use them now (2)	once a year (3)	once a month (4)	2 to 3 times a month (5)	once a week (6)	a few times a week (7)	every day (8)
Monetary-based accommodation sharing (e.g. Airbnb, HomeAway)	○	○	○	○	○	○	○	○
Monetary-based access to clothing, accessories and toys (e.g. Rent the Runway, DesignerShare, BabyQuip)	○	○	○	○	○	○	○	○
Monetary-based transportation (e.g. Uber, Lyft, Gett, Zimride)	○	○	○	○	○	○	○	○
Monetary-based childcare, petcare, babysitting and caregiving (e.g. Care.com, UrbanSitter, Bubble, DogVacay, Rover)	○	○	○	○	○	○	○	○
Monetary-based access to everyday items, equipment and household goods (e.g. Fat Llama, GoShare, Dolly, Zilok)	○	○	○	○	○	○	○	○
Monetary-based rent of space (e.g. Just Park, Peerspace)	○	○	○	○	○	○	○	○
Monetary-based knowledge and talent sharing (e.g. TaskRabbit, Zaarly, Upwork)	○	○	○	○	○	○	○	○
Finance (e.g. CrowdCube. Kickstarter, Sofi, Lending Club)	○	○	○	○	○	○	○	○
Monetary-based experience sharing (e.g. Vayable, EatWith)	○	○	○	○	○	○	○	○
Monetary-based books exchange (e.g. PaperBack Swap)	○	○	○	○	○	○	○	○
Nonmonetary-based accommodation (e.g. Couchsurfing, GuesttoGuest, HomeExchange)	○	○	○	○	○	○	○	○

Nonmonetary-based access to clothing, baby equipment and accessories (e.g. Outdress)	○	○	○	○	○	○	○	○
Nonmonetary-based access to everyday items and household goods (e.g. Freecycle, Freegle)	○	○	○	○	○	○	○	○
Gifts exchange (e.g. GiftFlow, Ziilch, Exchango, Freelly)	○	○	○	○	○	○	○	○
Nonmonetary-based rent of space (e.g. Shared Earth, YardShare)	○	○	○	○	○	○	○	○
Nonmonetary-based knowledge and talent sharing (e.g. TimeBank, free skills provision through StreetBank)	○	○	○	○	○	○	○	○
Nonmonetary-based books exchange (e.g. BookMooch, BookCrossing)	○	○	○	○	○	○	○	○

DEMOGRAPHICS

In this section you will be asked to answer general questions about you.
Q6 What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Prefer not to say (3)

Q7 How old are you?

- ○ 18 - 20 (6)
- ○ 20 - 29 (1)
- ○ 30 - 39 (2)
- ○ 40 -49 (3)
- ○ 50 - 59 (4)
- ○ Over 60 (5)

Q8 What is your current employment status?

- ○ Full time employed (1)
- ○ Part time employed (2)
- ○ Out of work (but looking for) (3)
- ○ Out of work (but not looking for) (4)
- ○ Homemaker (5)
- ○ Student (6)
- ○ Retired (7)
- ○ Unable to work (8)

Q9 What is your ethnicity?

- ○ Non-Hispanic White or Euro-American (1)
- ○ Black, Afro-Caribbean, or African American (2)
- ○ Latino or Hispanic American (3)
- ○ East Asian or Asian American (4)
- ○ South Asian or Indian American (5)
- ○ Middle Eastern or Arab American (6)
- ○ Native American or Alaskan Native (7)
- ○ Mixed (9)
- ○ Other (8)

Q10 What is the highest level of education you have completed?

- ○ Some high school or less (1)
- ○ High school graduate or equivalent (2)
- ○ Vocational/technical school (two year program) (3)
- ○ Some college, but no degree (4)
- ○ College graduate (four year program) (5)
- ○ Some graduate school, but not degree (6)
- ○ Graduate degree (MSc, MBA, PhD, etc.) (7)
- ○ Professional degree (M.D., J.D., etc.) (8)

Q11 What is your area of residence:

- ○ Urbanized Area (50,000 or more people) (1)
- ○ Urban Cluster (at least 2,500 and less than 50,000 people) (2)
- ○ Rural (all other areas) (3)

Q12 It would be helpful for analysis, to know the income bracket of your household (annual household income before tax).

- ○ $0 - $24,999 (1)
- ○ $25,000 - $49,999 (2)

- ○ $50,000 - $74,999 (3)
- ○ $75,000 - $99,999 (4)
- ○ More than $100,000 (5)

Q13 Overall, how much time you spend using sharing economy platforms on a monthly basis?

- ○ less than once a month (1)
- ○ once a month (2)
- ○ 2-3 times a month (3)
- ○ once a week (4)
- ○ several times a week (5)
- ○ every day (6)
- ○ several times a day (7)

MAIN CONSTRUCTS

Q14 Please select the options that best describe your attitude to sharing economy platforms and associated communities:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
Overall, my membership in sharing economy platforms and the associated communities reflect the way I feel about myself	○	○	○	○	○	○	○
The sharing economy platforms and the associated communities I belong to have been an important reflection of who I am	○	○	○	○	○	○	○
The sharing economy platforms and the associated communities I belong to have been important to my sense of what kind of person I am	○	○	○	○	○	○	○
In general, belonging to sharing economy platforms and the associated communities is an important part of my self-image	○	○	○	○	○	○	○

Q15 Please select the options that best describe the perception of the benefits provided by sharing economy platforms, compared to traditional providers of similar goods and services (e.g. hotels, taxi service providers, offline market retailers):

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
The overall benefits of using sharing economy platforms are greater than the benefits one receives when using traditional providers	○	○	○	○	○	○	○
Overall, using sharing economy platforms is more beneficial compared to when using traditional providers	○	○	○	○	○	○	○
The overall impact of using sharing economy platforms is more favourable than when using other traditional providers	○	○	○	○	○	○	○

Q16 Please select the options that best describe the perception of your benefits provided by sharing economy platforms, compared to the benefits that other users of these platforms receive:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
My overall benefits of using sharing economy platforms are greater than the benefits experienced by other users	○	○	○	○	○	○	○
Overall, sharing economy platforms have been more beneficial to me compared to other users	○	○	○	○	○	○	○
The overall impact of using sharing economy platforms is more favorable to me than other users of these platforms	○	○	○	○	○	○	○

Q17 Please select the options that best describes the reason why you participate in the sharing economy.

I participate in the sharing economy because:

	strongly disagree (1)	disagree (2)	somewhat disagree (3)	neither agree nor disagree (4)	somewhat agree (5)	agree (6)	strongly agree (7)
I accomplish just what I want to	○	○	○	○	○	○	○
I can use products/services that I need	○	○	○	○	○	○	○
I find the products/services that I am looking for	○	○	○	○	○	○	○
I feel excited because I do not have to approach another providers to find the products/services I am looking for	○	○	○	○	○	○	○
It is truly a joy	○	○	○	○	○	○	○
not because I have to, but because I want to	○	○	○	○	○	○	○
It truly feels like an escape	○	○	○	○	○	○	○
Compared to other things I can do, it is truly enjoyable	○	○	○	○	○	○	○
I enjoy being immersed in exciting new products/services	○	○	○	○	○	○	○
I enjoy it for its own sake, not just for the products/services I share	○	○	○	○	○	○	○
I have a good time because I am able to act on the "spur-of-the-moment."	○	○	○	○	○	○	○
I feel the excitement of the hunt	○	○	○	○	○	○	○
I am able to forget my problems	○	○	○	○	○	○	○
I feel a sense of adventure	○	○	○	○	○	○	○
It is a good way to spend time	○	○	○	○	○	○	○

Q18 Please select to which extent you agree that the procedures through which sharing economy transactions occur are fair (e.g. objective regulation of relationships between involved parties, transparent conditions of relations, the ability to dispute/negotiate the conditions and etc.):

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
Users are able to express their views and feelings when negotiating the procedures of transactions	○	○	○	○	○	○	○
Users can influence the outcomes of these procedures	○	○	○	○	○	○	○
The procedures are consistent among all users of sharing economy platforms	○	○	○	○	○	○	○
The procedures of engaging in transactions are free of bias	○	○	○	○	○	○	○
The procedures of engaging in transactions are based on accurate information	○	○	○	○	○	○	○
Users are able to appeal the outcomes of procedures when engaging in transactions	○	○	○	○	○	○	○
The procedures of engaging in transactions uphold ethical and moral standards	○	○	○	○	○	○	○

Q19 Please select the options that best apply to the statements below, considering your perception of the outcomes of sharing economy transactions (e.g. monetary savings, social interactions, quality of goods and services):

	strongly disagree (1)	disagree (2)	somewhat disagree (3)	neither agree nor disagree (4)	somewhat agree (5)	agree (6)	strongly agree (7)
The outcomes reflect the effort that users put into undertaking the transactions	○	○	○	○	○	○	○
The outcomes are appropriate for what users undertake to complete a transaction	○	○	○	○	○	○	○
The outcomes reflect what users have contributed into the transactions, in terms of money, effort or time spent	○	○	○	○	○	○	○
The outcomes are justified, given users' contribution to sharing economy transactions, in terms of money, effort or time spent	○	○	○	○	○	○	○

Q20 Please select the options that best apply to the statements below, considering the frequency of mutually rewarding relations in the sharing economy:

	never (1)	seldom (2)	sometimes (3)	frequently (4)	always (5)
How often do you feel you invest more in the relationship with other parties of sharing economy transactions than you receive in return?	○	○	○	○	○
How often do you feel you lay out yourself too much in view of what you achieve?	○	○	○	○	○
How often do you feel you give sharing economy platforms and associated communities a lot of time and attention, but meet with little appreciation?	○	○	○	○	○

Q21 Please select the options that best describe your reaction to non-mutually rewarding relationships with other parties of sharing economy transactions:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I try to see positive side	○	○	○	○	○	○	○
I try to step back from the situation and be more objective	○	○	○	○	○	○	○
I prepare for the worst	○	○	○	○	○	○	○
Sometimes, I take it out on other people when I feel angry or depressed	○	○	○	○	○	○	○
I keep my feelings to myself	○	○	○	○	○	○	○
I get busy with other things in order to keep my mind off the problem	○	○	○	○	○	○	○
I don't worry about it; figure everything will probably work out fine	○	○	○	○	○	○	○

Q22 Please select the options that best describe your reaction to non-mutually rewarding relationships with other parties of sharing economy transactions:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I take things one step at a time (1)	○	○	○	○	○	○	○
I consider several alternatives for handling the problem (2)	○	○	○	○	○	○	○
I draw on my past experiences, when I was in a similar situation (3)	○	○	○	○	○	○	○
I try to find out more about the situation (4)	○	○	○	○	○	○	○
I talk about the situation with other people, who have been using sharing economy platforms (5)	○	○	○	○	○	○	○
I take some positive action (6)	○	○	○	○	○	○	○
I talk with a spouse or other relative about the problem (12)	○	○	○	○	○	○	○
I talk with a friend about the situation (13)	○	○	○	○	○	○	○

The following questions refer to the behavioral and cognitive processes following the perception of the degree to which the relationships with another party of transactions in the sharing economy are mutually rewarding.

Q23 Please select the options that best apply to the statements:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I defend sharing economy platforms and associated communities when others criticize them	○	○	○	○	○	○	○
I have a strong sense of loyalty to sharing economy platforms and associated communities	○	○	○	○	○	○	○
I do not lookout for another source to get goods and services that sharing economy platforms offer	○	○	○	○	○	○	○
I expect to be using sharing economy platforms for some time	○	○	○	○	○	○	○
If an alternative provider (not operating in the sharing economy) made me a better offer, I would not take it on	○	○	○	○	○	○	○
I am very committed to sharing economy platforms and associated communities	○	○	○	○	○	○	○
I am quite willing to make long-term investments in using sharing economy platforms	○	○	○	○	○	○	○
My relationship with sharing economy platforms and associated communities is a long-term alliance	○	○	○	○	○	○	○
I am patient with sharing economy platforms and associated communities when they make mistakes that cause me trouble	○	○	○	○	○	○	○
I am willing to dedicate whatever people and resources it takes to make sharing economy platforms and associated communities to prosper	○	○	○	○	○	○	○

Q24 Please select the options that best describe your overall stance in regards to five statements below:

When having exchange relationships with people it is important ...

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**	
to receiv	○	○	○	○	○	○	○	○	○	○	to give
I am concerned with what I receive	○	○	○	○	○	○	○	○	○	○	I am concerned with what I contribute
I watch out for my own good	○	○	○	○	○	○	○	○	○	○	I help others
my hard work should benefit me	○	○	○	○	○	○	○	○	○	○	my hard work should benefit others
to look out for myslef	○	○	○	○	○	○	○	○	○	○	to give than to receive

Q25 Please select the options that best describe your overall stance in regards to the statements below:

	strongly disagree (1)	**disagree (2)**	**somewh at disagree (3)**	**neither agree nor disagree (4)**	**somewh at agree (5)**	**agree (6)**	**strongly agree (7)**
Whenever I'm faced with a choice, I try to imagine what all the other possibilities are, even ones that aren't present at the moment.	○	○	○	○	○	○	○
My decisions are well thought through	○	○	○	○	○	○	○
I am uncomfortable making decisions before I know all of my options.	○	○	○	○	○	○	○
Before making a choice, I consider many alternatives thoroughly	○	○	○	○	○	○	○
No matter what I do, I have the highest standards for myself	○	○	○	○	○	○	○

Q26 Please select the options that apply to each of the statements below, considering the consequences of non-mutually rewarding relationships with other parties of sharing economy transactions (e.g. overpayment, bad quality services/products, negative emotions):

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
I am at risk of experiencing negative consequences	○	○	○	○	○	○	○
It is likely that I will experience negative consequences	○	○	○	○	○	○	○
It is possible that I will experience negative consequences	○	○	○	○	○	○	○
I believe that negative consequences are severe	○	○	○	○	○	○	○
I believe that negative consequences are serious	○	○	○	○	○	○	○
I believe that negative consequences are significant	○	○	○	○	○	○	○

Q27 Please select the options that apply to each of the statements below:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
It is easy to get fair rewards in sharing economy transaction	○	○	○	○	○	○	○
It is plausible to get fair rewards in sharing economy transactions	○	○	○	○	○	○	○
I am able to get fair rewards in sharing economy transactions without much effort	○	○	○	○	○	○	○

Q28 Please select the options that apply to each of the statements below, considering the consequences of non-mutually rewarding relationships with other parties of sharing economy transactions (e.g. overpayment, bad quality services/products, negative emotions):

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
Trying to get fair rewards in sharing economy transactions will work in avoiding negative consequences	○	○	○	○	○	○	○
Trying to get fair rewards in sharing economy transactions will be effective in avoiding negative consequences	○	○	○	○	○	○	○
By trying to get fair rewards in sharing economy transactions I will most likely be protected from negative consequences	○	○	○	○	○	○	○

Q29 Please select the options that apply to each of the statements below:

	strongly disagree (1)	**disagree (2)**	**somewhat disagree (3)**	**neither agree nor disagree (4)**	**somewhat agree (5)**	**agree (6)**	**strongly agree (7)**
People who are important to me think that I should use sharing economy platforms	○	○	○	○	○	○	○
People who influence my behavior think that I should use sharing economy platforms	○	○	○	○	○	○	○
People whose opinions I value prefer me to use sharing economy platforms	○	○	○	○	○	○	○

Q30 Please use the field below to leave any comments, questions or concerns you may have:

_____

8.3. The Analysis of Control Variables for Research Model 1

Gender				
Path	**$\Delta\chi^2$**	**Sig**	**Male Coef. (t-test)**	**Female Coef. (t-test)**
Identification --> Use Behaviour	0.196	ns	-0.159 (-1.430ns)	-0.141 (-0.786ns)
Egoistic Belief --> Use Behaviour	0.518	ns	0.180 (2.386 *)	0.169 (3.438***)
Reciprocity Norm --> Use Behaviour	1.857	ns	0.268 (1.732ns)	0.268 (3.386***)
Perceived Social Value --> Use Behaviour	0.047	ns	0.639 (5.790***)	0.593 (5.496***)
Use Behaviour --> Subjective Wellbeing	6.557	*	0.765 (10.281***)	0.726 (10.763***)
Use Behaviour --> Social Inclusion	0.037	ns	0.521 (6.952***)	0.539 (8.019***)
Age				
Path	**$\Delta\chi^2$**	**Sig**	**Young Coef. (t-test)**	**Old Coef. (t-test)**
Identification --> Use Behaviour	11.492	**	-0.091 (2.363**)	-0.106 (0.276ns)
Egoistic Belief --> Use Behaviour	2.469	ns	0.182 (1.058ns)	0.157 (3.745***)
Reciprocity Norm --> Use Behaviour	7.901	**	0.362 (2.721**)	0.346 (3.033**)
Perceived Social Value --> Use Behaviour	8.011	**	0.784 (6.343***)	0.620 (4.570***)
Use Behaviour --> Subjective Wellbeing	9.979	**	.875 (8.348; ***)	.722 (10.972; ***)
Use Behaviour --> Social Inclusion	59.23	***	.654 (8.174; ***)	.597 (7.029; ***)
Income				
Path	**$\Delta\chi^2$**	**Sig**	**Low Coef. (t-test)**	**High Coef. (t-test)**
Identification --> Use Behaviour	0.018	ns	-0.203 (-1.369ns)	-0.240 (-1.242ns)
Egoistic Belief --> Use Behaviour	3.677	ns	0.188 (3.417***)	0.246 (3.277**)
Reciprocity Norm --> Use Behaviour	3.677	ns	0.360 (2.240*)	0.404 (4.370***)
Perceived Social Value --> Use Behaviour	0.863	ns	0.596 (6.110***)	0.667 (5.555***)
Use Behaviour --> Subjective Wellbeing	3.16	ns	.782 (11.585; ***)	.701 (8.008; ***)
Use Behaviour --> Social Inclusion	1.848	ns	.518 (7.702; ***)	.554 (6.621; ***)

8.4. The Analysis of Control Variables for Research Model 2

Gender				
Path	$\Delta\chi^2$	**Sig**	**Male Coef. (t-test)**	**Female Coef. (t-test)**
Social Identity ---> Reciprocity	63.192	**	0.427 (1.854 ns)	0.364 (3.839***)
Outgroup Comparison ---> Reciprocity	64.974	**	-0.532 (-2.407*)	-0.473 (-2.696**)
Ingroup Comparison ---> Reciprocity	62.266	**	0.720 (2.798**)	0.584 (4.059***)
Maximisation ---> Reciprocity	62.689	**	0.127 (0.422 ns)	0.120 (1.518 ns)
Procedural Fairness ---> Reciprocity	62.252	**	0.405 (2.632**)	0.326 (1.942ns)
Reciprocity ---> Emotion-Focused Coping	65.607	**	0.774 (9.026 ***)	0.796 (9.251***)
Reciprocity ---> Problem-Focused Coping	83.629	***	0.810 (10.594***)	0.663 (7.186***)
Reciprocity ---> Relationship Commitment	71.420	**	0.585 (6.124***)	0.639 (4.446***)
Problem-Focused Coping ---> Relationship Commitment	69.320	**	0.372 (0.830 ns)	0.414 (6.742 ***)
Age				
Path	$\Delta\chi^2$	**Sig**	**Younger Coef. (t-test)**	**Older Coef. (t-test)**
Social Identity ---> Reciprocity	108.494	***	0.366 (0.734ns)	0.303 (3.994***)
Outgroup Comparison ---> Reciprocity	106.140	***	-0.491 (-1.710ns)	-0.402 (-3.089**)
Ingroup Comparison ---> Reciprocity	107.160	***	0.689 (3.338***)	0.541 (3.070**)
Maximisation ---> Reciprocity	106.143	***	0.209 (2.069*)	0.159 (1.873 ns)
Procedural Fairness ---> Reciprocity	108.245	***	0.245 (1.323ns)	0.183 (2.309*)
Reciprocity ---> Emotion-Focused Coping	140.272	***	0.822 (11.201***)	0.748 (6.052***)
Reciprocity ---> Problem-Focused Coping	149.391	***	0.760 (12.051***)	0.663 (6.177***)
Reciprocity ---> Relationship Commitment	106.198	***	0.466 (3.016**)	0.534 (5.987***)
Problem-Focused Coping ---> Relationship Commitment	106.513	***	0.456 (3.338***)	0.390 (5.826***)
Income				
Path	$\Delta\chi^2$	**Sig**	**Low Coef. (t-test)**	**High Coef. (t-test)**
Social Identity ---> Reciprocity	131.497	***	0.351 (2.355*)	0.311 (2.958**)

Outgroup Comparison ---> Reciprocity	112.764	***	-0.516 (-2.224*)	-0.425 (-2.848**)
Ingroup Comparison ---> Reciprocity	115.540	***	0.604 (4.212***)	0.651 (3.186**)
Maximisation ---> Reciprocity	112.718	***	0.184 (1.443ns)	0.159 (1.628ns)
Procedural Fairness ---> Reciprocity	114.278	***	0.263 (0.827ns)	0.265 (2.677**)
Reciprocity ---> Emotion-Focused Coping	113.322	***	0.737 (8.820***)	0.783 (9.589***)
Reciprocity ---> Problem-Focused Coping	115.876	***	0.667 (9.395***)	0.701 (8.729***)
Reciprocity ---> Relationship Commitment	112.705	***	0.472 (4.160***)	0.465 (4.080***)
Problem-Focused Coping ---> Relationship Commitment	114.642	***	0.522 (7.332***)	0.412 (4.964***)

9. References

ACQUIER, A. & CARBONE, V. 2018. Sharing economy and social innovation. *The Cambridge Handbook of the Sharing Economy and Law*, 51-64.

ACQUIER, A., DAUDIGEOS, T. & PINKSE, J. 2017. Promises and paradoxes of the sharing economy: An organizing framework. *Technological Forecasting and Social Change,* 125**,** 1-10.

ADAMS, J. S. 1963. Towards an understanding of inequity. *The Journal of Abnormal and Social Psychology,* 67**,** 422.

ADAMS, J. S. & FREEDMAN, S. 1976. Equity theory revisited: Comments and annotated bibliography. *Advances in experimental social psychology.* Elsevier.

AHSAN, M. 2018. Entrepreneurship and ethics in the sharing economy: A critical perspective. *Journal of Business Ethics***,** 1-15.

AJZEN, I. & FISHBEIN, M. 1980. Understanding attitudes and predicting social behaviour.

AKBAR, P., MAI, R. & HOFFMANN, S. 2016. When do materialistic consumers join commercial sharing systems. *Journal of Business Research,* 69**,** 4215-4224.

AKERLOF, G. A. 1978. The market for "lemons": Quality uncertainty and the market mechanism. *Uncertainty in economics.* Elsevier.

AKHMEDOVA, A., MARIMON, F. & MAS-MACHUCA, M. 2020. Winning strategies for customer loyalty in the sharing economy: A mixed-methods study. *Journal of Business Research,* 112**,** 33-44.

ALBRIGHT, J. J. & PARK, H. M. 2009. Confirmatory factor analysis using amos, LISREL, Mplus, SAS/STAT CALIS.

ALEXOPOULOS, C., TIMMERMANS, E. & MCNALLIE, J. 2020. Swiping more, committing less: Unraveling the links among dating app use, dating app success, and intention to commit infidelity. *Computers in Human Behavior,* 102**,** 172-180.

ALLPORT, D. A. 1984. Speech production and comprehension: One lexicon or two? *Cognition and motor processes.* Springer.

ALONI, E. 2016. Pluralizing the Sharing Economy.

ALRECK, P. L. & SETTLE, R. B. 1994. *The survey research handbook*, McGraw-Hill.

AMARO, S., ANDREU, L. & HUANG, S. 2018. Millenials' intentions to book on Airbnb. *Current Issues in Tourism***,** 1-15.

AMBROSINO, G., NELSON, J. D., BOERO, M. & PETTINELLI, I. 2016. Enabling intermodal urban transport through complementary services: From Flexible Mobility Services to the Shared Use Mobility Agency. *Research in Transportation Economics,* 59**,** 179-184.

ANDERSON, E. & WEITZ, B. 1992. The use of pledges to build and sustain commitment in distribution channels. *Journal of marketing research,* 29**,** 18-34.

ANDERSON, J. C. & GERBING, D. W. 1988. Structural equation modeling in practice: A review and recommended two-step approach. *Psychological bulletin,* 103**,** 411.

ANDERSON, L., OSTROM, A. L., CORUS, C., FISK, R. P., GALLAN, A. S., GIRALDO, M., MENDE, M., MULDER, M., RAYBURN, S. W. & ROSENBAUM, M. S. 2013. Transformative service research: An agenda for the future. *Journal of Business Research,* 66**,** 1203-1210.

ANDERSSON, L. M. & BATEMAN, T. S. 1997. Cynicism in the workplace: Some causes and effects. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior,* 18**,** 449-469.

ANTHONY, D. 2005. Cooperation in microcredit borrowing groups: Identity, sanctions, and reciprocity in the production of collective goods. *American Sociological Review,* 70**,** 496-515.

APTEKAR, S. 2016. Gifts Among Strangers: The Social Organization of Freecycle Giving. *Social Problems,* 63**,** 266-283.
ARBUCKLE, J. L. 2011. IBM SPSS Amos 20 user's guide. *Amos Development Corporation, SPSS Inc*.
ARONSON, E., CARLSMITH, J. M. & ELLSWORTH, P. C. 1990. *Methods of research in social psychology,* McGraw-Hill New York.
ARORA, N. N., JINDAL, A., SINGH, M., KUMAR, N. & KUMAR, P. A novel smart meter for better control over devices including electric vehicles and to enable smart use of power in smart home. 2015 IEEE International Transportation Electrification Conference, ITEC-India 2015, 2016.
AU, N., NGAI, E. W. & CHENG, T. E. 2008. Extending the understanding of end user information systems satisfaction formation: An equitable needs fulfillment model approach. *MIS quarterly***,** 43-66.
AULAKH, P. S. & GENCTURK, E. F. 2000. International principal–agent relationships: Control, governance and performance. *Industrial Marketing Management,* 29**,** 521-538.
AZNAR, J. P., SAYERAS, J. M., ROCAFORT, A. & GALIANA, J. 2017. The irruption of Airbnb and its effects on hotel profitability: An analysis of Barcelona's hotel sector. *Intangible Capital,* 13**,** 147-159.
BABIN, B. J., DARDEN, W. R. & GRIFFIN, M. 1994. Work and/or fun: measuring hedonic and utilitarian shopping value. *Journal of consumer research,* 20**,** 644-656.
BACHNIK, K. 2016. SUSTAINABLE CONSUMPTION THROUGH THE SHARING ECONOMY. *KONSUMPCJA ZRÓWNOWAŻONA STYMULOWANA GOSPODARKĄ WSPÓLNEGO UŻYTKOWANIA.***,** 35-44.
BACON, D. R., SAUER, P. L. & YOUNG, M. 1995. Composite reliability in structural equations modeling. *Educational and psychological measurement,* 55**,** 394-406.
BAGOZZI, R. P. 1984. A prospectus for theory construction in marketing. *Journal of Marketing,* 48**,** 11-29.
BAGOZZI, R. P. & DHOLAKIA, U. M. 2002. Intentional social action in virtual communities. *Journal of interactive marketing,* 16**,** 2-21.
BAGOZZI, R. P. & PHILLIPS, L. W. 1982. Representing and testing organizational theories: A holistic construal. *Administrative science quarterly***,** 459-489.
BAGOZZI, R. P. & YI, Y. 1991. Multitrait-multimethod matrices in consumer research. *Journal of consumer research,* 17**,** 426-439.
BAKKER, A. B., SCHAUFELI, W. B., SIXMA, H. J., BOSVELD, W. & VAN DIERENDONCK, D. 2000. Patient demands, lack of reciprocity, and burnout: A five-year longitudinal study among general practitioners. *Journal of organizational behavior,* 21**,** 425-441.
BÁLINT, D. & TRÓCSÁNYI, A. New ways of mobility: the birth of ridesharing. A case study from Hungary. *HUNGARIAN GEOGRAPHICAL BULLETIN 65 2016 (4)***,** 391.
BALLÚS-ARMET, I., SHAHEEN, S., CLONTS, K. & WEINZIMMER, D. 2014. Peer-to-Peer Carsharing: Exploring Public Perception and Market Characteristics in the San Francisco Bay Area, California. *Transportation Research Record: Journal of the Transportation Research Board***,** 27-36.
BANDURA, A. & MCCLELLAND, D. C. 1977. *Social learning theory*, Englewood cliffs Prentice Hall.
BARDHI, F. & ECKHARDT, G. M. 2012. Access-Based Consumption: The Case of Car Sharing. *Journal of Consumer Research,* 39**,** 881-898.
BARDHI, F., ECKHARDT, G. M. & ARNOULD, E. J. 2012. Liquid relationship to possessions. *Journal of Consumer Research,* 39**,** 510-529.
BARNES, S. J. & MATTSSON, J. 2016a. Building tribal communities in the collaborative economy: an innovation framework. *Prometheus,* 34**,** 95-113.
BARNES, S. J. & MATTSSON, J. 2016b. Understanding current and future issues in collaborative consumption: A four-stage Delphi study. *Technological Forecasting and Social Change,* 104**,** 200-211.

BARNES, S. J. & MATTSSON, J. 2017. Understanding collaborative consumption: Test of a theoretical model. *Technological Forecasting and Social Change,* 118**,** 281-292.
BECKER, H. S. 1982. CULTURE+ A SOCIOLOGICAL VIEW. *Yale Review,* 71**,** 513-527.
BEGUM, L. & ANJUM, M. 2016. Beyond the creative class, mapping the collaborative economy of Bangladeshi creative industries: Case study of Oitij-jo. *South Asian Popular Culture,* 14**,** 137-153.
BELARMINO, A., WHALEN, E. A. & KOH, Y. 2017. Comparing guests' key attributes of peer-to-peer accommodations and hotels: mixed-methods approach. *Current Issues in Tourism***,** 1-7.
BELK, R. 2007. Why not share rather than own? *The Annals of the American Academy of Political and Social Science,* 611**,** 126-140.
BELK, R. 2010. Sharing. *Journal of consumer research,* 36**,** 715-734.
BELK, R. 2014. You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research,* 67**,** 1595-1600.
BELK, R. & LLAMAS, R. 2012. The nature and effects of sharing in consumer behavior. *Transformative consumer research for personal and collective well-being***,** 625-646.
BELK, R. W. 1988. Possessions and the extended self. *Journal of consumer research,* 15**,** 139-168.
BELK, R. W. 2013. Extended self in a digital world. *Journal of Consumer Research,* 40**,** 477-500.
BENJAAFAR, S., KONG, G., LI, X. & COURCOUBETIS, C. 2019. Peer-to-peer product sharing: Implications for ownership, usage, and social welfare in the sharing economy. *Management Science,* 65**,** 477-493.
BENOIT, S., BAKER, T. L., BOLTON, R. N., GRUBER, T. & KANDAMPULLY, J. 2017. A triadic framework for collaborative consumption (CC): Motives, activities and resources & capabilities of actors. *Journal of Business Research,* 79**,** 219-227.
BERNARD, H. R. & BERNARD, H. R. 2013. *Social research methods: Qualitative and quantitative approaches,* Sage.
BHATTACHERJEE, A. 2012. Social science research: Principles, methods, and practices.
BILLINGS, A. G. & MOOS, R. H. 1981. The role of coping responses and social resources in attenuating the stress of life events. *Journal of behavioral medicine,* 4**,** 139-157.
BINNINGER, A.-S., OURAHMOUNE, N. & ROBERT, I. 2015. Collaborative Consumption And Sustainability: A Discursive Analysis Of Consumer Representations And Collaborative Website Narratives. *Journal of Applied Business Research,* 31**,** 969.
BIRDSALL, M. 2014. Carsharing in a Sharing Economy. *Institute of Transportation Engineers. ITE Journal,* 84**,** 37-40.
BIRON, M. & DE REUVER, R. 2013. Restoring balance? Status inconsistency, absenteeism, and HRM practices. *European Journal of Work and Organizational Psychology,* 22**,** 683-696.
BLACKMON, K. & MAYLOR, H. 2005. Researching business and management. *HM Blackmon, Researching Business and Management. China: Palgrave MacMillan*.
BLAU, P. M. 1964. *Exchange and Power in Social Life,* New York, Wiley.
BOATENG, H., KOSIBA, J. P. B. & OKOE, A. F. 2019. Determinants of consumers' participation in the sharing economy: A social exchange perspective within an emerging economy context. *International Journal of Contemporary Hospitality Management*.
BÖCKER, L. & MEELEN, T. Sharing for people, planet or profit? Analysing motivations for intended sharing economy participation. *Environmental Innovation and Societal Transitions*.
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.
BONCIU, F. & BÂLGAR, A.-C. 2016. Sharing Economy as a Contributor to Sustainable Growth. An EU Perspective. *Romanian Journal of European Affairs,* 16**,** 36-45.
BOTSMAN, R. & ROGERS, R. 2011. *What's mine is yours: how collaborative consumption is changing the way we live,* Collins London.

BOUDREAU, M.-C., GEFEN, D. & STRAUB, D. W. 2001. Validation in information systems research: A state-of-the-art assessment. *MIS quarterly*, 1-16.
BOUNCKEN, R. B. & REUSCHL, A. J. 2016. Coworking-spaces: how a phenomenon of the sharing economy builds a novel trend for the workplace and for entrepreneurship. *Review of Managerial Science*, 1-18.
BOURDAGE, J. S., GOUPAL, A., NEILSON, T., LUKACIK, E.-R. & LEE, N. 2018. Personality, equity sensitivity, and discretionary workplace behavior. *Personality and Individual Differences,* 120**,** 144-150.
BRADBURN, N. M. & CAPLOVITZ, D. 1965. *Reports on happiness: A pilot study of behavior related to mental health,* Aldine Pub. Co.
BRADLEY, N. 1999. Sampling for Internet surveys. An examination of respondent selection for Internet research. *Market Research Society. Journal.,* 41**,** 1-10.
BREHM, S. S. & BREHM, J. W. 2013. *Psychological reactance: A theory of freedom and control,* Academic Press.
BRIDGES, J. & VÁSQUEZ, C. 2018. If nearly all Airbnb reviews are positive, does that make them meaningless? *Current Issues in Tourism,* 21**,** 2057-2075.
BROADBENT, R. & PAPADOPOULOS, T. 2013. Impact and benefits of digital inclusion for social housing residents. *Community Development,* 44**,** 55-67.
BROWN, T. A. 2015. *Confirmatory factor analysis for applied research,* Guilford publications.
BROWNE, K. 2005. Snowball sampling: using social networks to research non-heterosexual women. *International journal of social research methodology,* 8**,** 47-60.
BRYMAN, A. B. 2011. *Business research methods,* New York: Oxford University Press Inc.
BUCHER, E., FIESELER, C. & LUTZ, C. 2016. What's mine is yours (for a nominal fee) – Exploring the spectrum of utilitarian to altruistic motives for Internet-mediated sharing. *Computers in Human Behavior,* 62**,** 316-326.
BURRELL, G. & MORGAN, G. 2017. *Sociological paradigms and organisational analysis: Elements of the sociology of corporate life,* Routledge.
BURROUGHS, J. E. & RINDFLEISCH, A. 2002. Materialism and well-being: A conflicting values perspective. *Journal of Consumer research,* 29**,** 348-370.
CAVAN, S. 1977. Review of JD Douglas's (1976)'Investigative Social Review: Individual and Team Field Research'. *The American Journal of Sociology,* 83**,** 809-11.
CHADEE, D. 2011. *Theories in social psychology,* John Wiley & Sons.
CHAN, S. H. J. & LAI, H. Y. I. 2017. Understanding the link between communication satisfaction, perceived justice and organizational citizenship behavior. *Journal of business research,* 70**,** 214-223.
CHENG, M. 2016. Current sharing economy media discourse in tourism. *Annals of Tourism Research,* 60**,** 111-114.
CHENG, M. & EDWARDS, D. 2019. A comparative automated content analysis approach on the review of the sharing economy discourse in tourism and hospitality. *Current Issues in Tourism,* 22**,** 35-49.
CHERRY, C. & PIDGEON, N. F. 2018. Is sharing the solution? Exploring public acceptability of the sharing economy. *Journal of Cleaner Production,* 195**,** 939-948.
CHERRYHOLMES, C. H. 1992. Notes on pragmatism and scientific realism. *Educational researcher,* 21**,** 13-17.
CHIU, C.-M., HSU, M.-H. & WANG, E. T. 2006. Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision support systems,* 42**,** 1872-1888.
CHIU, C. M., CHIU, C. S. & CHANG, H. C. 2007. Examining the integrated influence of fairness and quality on learners' satisfaction and Web-based learning continuance intention. *Information systems journal,* 17**,** 271-287.

CHOU, E.-Y., LIN, C.-Y. & HUANG, H.-C. 2016. Fairness and devotion go far: Integrating online justice and value co-creation in virtual communities. *International Journal of Information Management,* 36**,** 60-72.
CHOW, W. S. & CHAN, L. S. 2008. Social network, social trust and shared goals in organizational knowledge sharing. *Information & management,* 45**,** 458-465.
CHOWDHURY, M. F. 2014. Interpretivism in aiding our understanding of the contemporary social world. *Open Journal of Philosophy,* 2014.
CHURCH, A. H. 1993. Estimating the effect of incentives on mail survey response rates: A meta-analysis. *Public opinion quarterly,* 57**,** 62-79.
CHYE KOH, H. & BOO, E. F. H. 2004. Organisational ethics and employee satisfaction and commitment. *Management Decision,* 42**,** 677-693.
CLARK, A. E. & OSWALD, A. J. 1996. Satisfaction and comparison income. *Journal of public economics,* 61**,** 359-381.
COCKAYNE, D. G. 2016. Sharing and neoliberal discourse: The economic function of sharing in the digital on-demand economy. *Geoforum,* 77**,** 73-82.
COHEN, B. & KIETZMANN, J. 2014. Ride On! Mobility Business Models for the Sharing Economy. *Organization & Environment,* 27**,** 279-296.
COHEN, L., MANION, L. & MORRISON, K. 2013. *Research methods in education,* routledge.
COLEMAN, J. S. & COLEMAN, J. S. 1994. *Foundations of social theory,* Harvard university press.
COLQUITT, J. A. 2001. On the dimensionality of organizational justice: A construct validation of a measure. *Journal of applied psychology,* 86**,** 386.
CONGER, J. A., KANUNGO, R. N. & MENON, S. T. 2000. Charismatic leadership and follower effects. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior,* 21**,** 747-767.
CONLON, D. E., LIND, E. A. & LISSAK, R. I. 1989. Nonlinear and Nonmonotonic Effects of Outcome on Procedural and Distributive Fairness Judgments 1. *Journal of Applied Social Psychology,* 19**,** 1085-1099.
CONNELLY, B. L., HAYNES, K. T., TIHANYI, L., GAMACHE, D. L. & DEVERS, C. E. 2016. Minding the gap: Antecedents and consequences of top management-to-worker pay dispersion. *Journal of Management,* 42**,** 862-885.
COOK, K. S. & EMERSON, R. M. 1987. Social exchange theory.
COOPER, H., OKAMURA, L. & GURKA, V. 1992. Social activity and subjective well-being. *Personality and Individual Differences,* 13**,** 573-583.
CORCIOLANI, M. & DALLI, D. 2014. Gift-giving, sharing and commodity exchange at Bookcrossing. com: new insights from a qualitative analysis. *Management Decision,* 52**,** 755-776.
COYLE-SHAPIRO, J. A. M., MORROW, P. C., RICHARDSON, R. & DUNN, S. R. 2002. Using profit sharing to enhance employee attitudes: A longitudinal examination of the effects on trust and commitment. *Human Resource Management,* 41**,** 423-439.
CRESWELL, J. W. & CLARK, V. L. P. 2017. *Designing and conducting mixed methods research,* Sage publications.
CRESWELL, J. W., PLANO CLARK, V. L., GUTMANN, M. L. & HANSON, W. E. 2003. Advanced mixed methods research designs. *Handbook of mixed methods in social and behavioral research,* 209**,** 240.
CRESWELL, J. W. & POTH, C. N. 2017. *Qualitative inquiry and research design: Choosing among five approaches,* Sage publications.
CRONBACH, L. J. 1951. Coefficient alpha and the internal structure of tests. *psychometrika,* 16**,** 297-334.
CROPANZANO, R. & MITCHELL, M. S. 2005. Social exchange theory: An interdisciplinary review. *Journal of management,* 31**,** 874-900.
CROPANZANO, R., PREHAR, C. A. & CHEN, P. Y. 2002. Using social exchange theory to distinguish procedural from interactional justice. *Group & Organization Management,* 27**,** 324-351.

CROTTY, M. 1998. *The foundations of social research: Meaning and perspective in the research process*, Sage.
CUSUMANO, M. A. 2015. How traditional firms must compete in the sharing economy. *Communications of the ACM,* 58**,** 32-34.
DABROWSKA, A. & GUTKOWSKA, K. 2015. Collaborative consumption as a new trend of sustainable consumption. *Acta Scientiarum Polonorum. Oeconomia,* 14.
DAGGER, T. S., DAVID, M. E. & NG, S. 2011. Do relationship benefits and maintenance drive commitment and loyalty? *Journal of services marketing*.
DARKE, P. R. & CHUNG, C. M. Y. 2005. Effects of pricing and promotion on consumer perceptions: it depends on how you frame it. *Journal of Retailing,* 81**,** 35-47.
DARKE, P. R. & DAHL, D. W. 2003. Fairness and discounts: The subjective value of a bargain. *Journal of Consumer psychology,* 13**,** 328-338.
DAVERTH, G., CASSELL, C. & HYDE, P. 2016. The subjectivity of fairness: managerial discretion and work–life balance. *Gender, Work & Organization,* 23**,** 89-107.
DAVI, A., HAUGHTON, D., NASR, N., SHAH, G., SKALETSKY, M. & SPACK, R. 2005. A review of two text-mining packages: SAS TextMining and WordStat. *The American Statistician,* 59**,** 89-103.
DAVIDSON, A., HABIBI, M. R. & LAROCHE, M. 2018. Materialism and the sharing economy: A cross-cultural study of American and Indian consumers. *Journal of Business Research,* 82**,** 364-372.
DAVLEMBAYEVA, D., PAPAGIANNIDIS, S. & ALAMANOS, E. Reciprocity and Social Exchange in the Sharing Economy. Conference on e-Business, e-Services and e-Society, 2019. Springer, 559-569.
DE LEEUW, E. D. 1992. *Data quality in mail, telephone and face to face surveys*, ERIC.
DE LEEUW, T. & GÖSSLING, T. 2016. Theorizing change revisited: An amended process model of institutional innovations and changes in institutional fields. *Journal of Cleaner Production,* 135**,** 435-448.
DE RIVERA, J., GORDO, Á., CASSIDY, P. & APESTEGUÍA, A. 2017. A netnographic study of P2P collaborative consumption platforms' user interface and design. *Environmental Innovation and Societal Transitions,* 23**,** 11-27.
DE VAUS, D. & DE VAUS, D. 2013. *Surveys in social research*, Routledge.
DECROP, A., DEL CHIAPPA, G., MALLARGÉ, J. & ZIDDA, P. 2018. "Couchsurfing has made me a better person and the world a better place": the transformative power of collaborative tourism experiences. *Journal of Travel & Tourism Marketing,* 35**,** 57-72.
DENZIN, N. K. & LINCOLN, Y. S. 2005. Paradigms and perspectives in contention. *The Sage handbook of qualitative research***,** 183-190.
DEREK, M. 2019. *The Sharing Economy and How it Is Changing Industries* [Online]. Small Business. Available: https://www.thebalancesmb.com/the-sharing-economy-and-how-it-changes-industries-4172234 [Accessed].
DEVLIN, J. F. 2005. A detailed study of financial exclusion in the UK. *Journal of Consumer Policy,* 28**,** 75-108.
DICKINSON, J. E., HIBBERT, J. F., FILIMONAU, V., CHERRETT, T., DAVIES, N., NORGATE, S., SPEED, C. & WINSTANLEY, C. 2017. Implementing smartphone enabled collaborative travel: Routes to success in the tourism domain. *Journal of Transport Geography,* 59**,** 100-110.
DIENER, E. 2000. Subjective well-being: The science of happiness and a proposal for a national index. *American psychologist,* 55**,** 34.
DIENER, E. & CRANDALL, R. 1978. *Ethics in social and behavioral research*, U Chicago Press.
DIENER, E., WIRTZ, D., TOV, W., KIM-PRIETO, C., CHOI, D.-W., OISHI, S. & BISWAS-DIENER, R. 2010. New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research,* 97**,** 143-156.

DOMÉNECH-PASCUAL, G. 2016. Sharing Economy and Regulatory Strategies towards Legal Change. *European Journal of Risk Regulation,* 7**,** 717-727.
DREDGE, D. & GYIMÓTHY, S. 2015. The collaborative economy and tourism: Critical perspectives, questionable claims and silenced voices. *Tourism Recreation Research,* 40**,** 286-302.
DURAN-SANCHEZ, A., ALVAREZ-GARCIA, J., DE LA CRUZ DEL RIO-RAMA, M. & PATRICIA MALDONADO-ERAZO, C. 2016. COLLABORATIVE ECONOMY: ANALYSIS OF SCIENTIFIC PRODUCTION IN ACADEMIC MAGAZINES. *REVISTA DE GESTAO E SECRETARIADO-GESEC,* 7**,** 1-20.
ELANGOVAN, A. & XIE, J. L. 2000. Effects of perceived power of supervisor on subordinate work attitudes. *Leadership & Organization Development Journal*.
ELLEN, I. G. 2015. Housing Low-Income Households: Lessons From the Sharing Economy? *Housing Policy Debate,* 25**,** 783-784.
ELLISON, N. B., STEINFIELD, C. & LAMPE, C. 2007. The benefits of Facebook "friends:" Social capital and college students' use of online social network sites. *Journal of computer-mediated communication,* 12**,** 1143-1168.
ELMADAĞ, A. B. & ELLINGER, A. E. 2018. Alleviating job stress to improve service employee work affect: the influence of rewarding. *Service Business,* 12**,** 121-141.
ERT, E., FLEISCHER, A. & MAGEN, N. 2016. Trust and reputation in the sharing economy: The role of personal photos in Airbnb. *Tourism Management,* 55**,** 62-73.
ERTZ, M., DURIF, F. & ARCAND, M. 2016. COLLABORATIVE CONSUMPTION: CONCEPTUAL SNAPSHOT AT A BUZZWORD. *Journal of Entrepreneurship Education,* 19**,** 1-23.
ESBEN RAHBEK GJERDRUM, P. & SARAH, N. 2015. Collaborative consumption: business model opportunities and barriers for fashion libraries. *Journal of Fashion Marketing and Management: An International Journal,* 19**,** 258-273.
ETTER, M., FIESELER, C. & WHELAN, G. 2019. Sharing economy, sharing responsibility? Corporate social responsibility in the digital age. *Journal of Business Ethics,* 159**,** 935-942.
EUROPEAN COMMISSION. 2018. *Study to Monitor the Economic Development of the Collaborative Economy in the EU* [Online]. Luxembourg: Publications Office of the European Union

Available: http://www.technopolis-group.com/wp-content/uploads/2018/08/CE_Final-report_PartA_Final_230218.pdf [Accessed].
FACTEAU, J. D., DOBBINS, G. H., RUSSELL, J. E., LADD, R. T. & KUDISCH, J. D. 1995. The influence of general perceptions of the training environment on pretraining motivation and perceived training transfer. *Journal of management,* 21**,** 1-25.
FAGERSTRØM, A., PAWAR, S., SIGURDSSON, V., FOXALL, G. R. & YANI-DE-SORIANO, M. 2017. That personal profile image might jeopardize your rental opportunity! On the relative impact of the seller's facial expressions upon buying behavior on Airbnb™. *Computers in Human Behavior,* 72**,** 123-131.
FELSON, M. & SPAETH, J. L. 1978. Community structure and collaborative consumption: A routine activity approach. *American Behavioral Scientist,* 21**,** 614-624.
FENG, Y. & YE, H. J. 2016. Why do you return the favor in online knowledge communities? A study of the motivations of reciprocity. *Computers in Human Behavior,* 63**,** 342-349.
FERRARI, M. Z. 2016. Beyond Uncertainties in the Sharing Economy: Opportunities for Social Capital. *European Journal of Risk Regulation,* 7**,** 664-674.
FERRARI, M. Z. 2017. Beyond Uncertainties in the Sharing Economy: Opportunities for Social Capital. *European Journal of Risk Regulation,* 7**,** 664-674.
FERRER-I-CARBONELL, A. 2005. Income and well-being: an empirical analysis of the comparison income effect. *Journal of public economics,* 89**,** 997-1019.
FERRER-I-CARBONELL, A. & GOWDY, J. M. 2007. Environmental degradation and happiness. *Ecological economics,* 60**,** 509-516.
FESTINGER, L. 1954. A theory of social comparison processes. *Human relations,* 7**,** 117-140.

FESTINGER, L. 1962. *A theory of cognitive dissonance*, Stanford university press.
FIZEL, J., KRAUTMANN, A. C. & HADLEY, L. 2002. Equity and arbitration in major league baseball. *Managerial and Decision Economics,* 23**,** 427-435.
FLOYD, D. L., PRENTICE-DUNN, S. & ROGERS, R. W. 2000. A meta-analysis of research on protection motivation theory. *Journal of applied social psychology,* 30**,** 407-429.
FOLGER, R. & KONOVSKY, M. A. 1989. Effects of procedural and distributive justice on reactions to pay raise decisions. *Academy of Management journal,* 32**,** 115-130.
FOLKMAN, S. & LAZARUS, R. S. 1988. Coping as a mediator of emotion. *Journal of personality and social psychology,* 54**,** 466.
FOLKMAN, S. & LAZARUS, R. S. 1990. Coping and emotion. *Psychological and biological approaches to emotion***,** 313-332.
FOLKMAN, S., LAZARUS, R. S., DUNKEL-SCHETTER, C., DELONGIS, A. & GRUEN, R. J. 1986. Dynamics of a stressful encounter: cognitive appraisal, coping, and encounter outcomes. *Journal of personality and social psychology,* 50**,** 992.
FOOTE, D. A. & HARMON, S. 2006. Measuring equity sensitivity. *Journal of Managerial Psychology,* 21**,** 90-108.
FORNELL, C. & LARCKER, D. F. 1981. Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research,* 18**,** 39-50.
FORNO, F. & GARIBALDI, R. 2015. Sharing Economy in Travel and Tourism: The Case of Home-Swapping in Italy. *Journal of Quality Assurance in Hospitality & Tourism,* 16**,** 202-220.
FRANKFORT-NACHMIAS, C. & NACHMIAS, D. 2007. *Study guide for research methods in the social sciences*, Macmillan.
FREMSTAD, A. 2017. Does Craigslist Reduce Waste? Evidence from California and Florida. *Ecological Economics,* 132**,** 135-143.
FRENKEN, K. & SCHOR, J. Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions*.
FRENKEN, K. & SCHOR, J. 2017. Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions,* 23**,** 3-10.
FRIEDKIN, N. E. 1992. An expected value model of social power: Predictions for selected exchange networks. *Social Networks,* 14**,** 213-229.
FURMAN, A. 2016. Exploring Affordances Of The Street. *Urban Regeneration & Sustainability***,** 250.
GANSKY, L. 2010. *The mesh: Why the future of business is sharing*, Penguin.
GARGIULO, E., GIANNANTONIO, R., GUERCIO, E., BOREAN, C. & ZENEZINI, G. 2015. Dynamic Ride Sharing Service: Are Users Ready to Adopt it? *Procedia Manufacturing,* 3**,** 777-784.
GEIGER, A., HORBEL, C. & GERMELMANN, C. C. 2017. "Give and take": how notions of sharing and context determine free peer-to-peer accommodation decisions. *Journal of Travel & Tourism Marketing***,** 1-11.
GEISSINGER, A., LAURELL, C., SANDSTRÖM, C., ERIKSSON, K. & NYKVIST, R. 2018. Digital entrepreneurship and field conditions for institutional change–Investigating the enabling role of cities. *Technological Forecasting and Social Change*.
GERMANN MOLZ, J. 2013. SOCIAL NETWORKING TECHNOLOGIES AND THE MORAL ECONOMY OF ALTERNATIVE TOURISM: THE CASE OF COUCHSURFING.ORG. *Annals of Tourism Research,* 43**,** 210-230.
GHAURI, P. & GRØNHAUG, K. 2010. Research methods in business studies (4. utg.). *Harlow: Financial Times Prentice Hall*.
GLEIM, M. R., JOHNSON, C. M. & LAWSON, S. J. 2019. Sharers and sellers: A multi-group examination of gig economy workers' perceptions. *Journal of Business Research,* 98**,** 142-152.
GONG, D., LIU, S., LIU, J. & REN, L. 2019. Who benefits from online financing? A sharing economy E-tailing platform perspective. *International Journal of Production Economics***,** 107490.

GÖSSLING, S. & HALL, M. C. 2019. Sharing versus collaborative economy: how to align ICT developments and the SDGs in tourism? *Journal of Sustainable Tourism,* 27**,** 74-96.
GRAHAM, C. 2004. ÔDoes happiness pay? An exploration based on panel data from RussiaÕ. *Journal of Economic Behavior,* 55**,** 319-342.
GREENBERG, J. 1987. A taxonomy of organizational justice theories. *Academy of Management review,* 12**,** 9-22.
GREENBERG, J. 1990. Employee theft as a reaction to underpayment inequity: The hidden cost of pay cuts. *Journal of applied psychology,* 75**,** 561.
GRETZEL, U., WERTHNER, H., KOO, C. & LAMSFUS, C. 2015. Conceptual foundations for understanding smart tourism ecosystems. *Computers in Human Behavior,* 50**,** 558-563.
GRIFFIN, M. L. & HEPBURN, J. R. 2005. Side-bets and reciprocity as determinants of organizational commitment among correctional officers. *Journal of Criminal Justice,* 33**,** 611-625.
GROVES, R. M. 2004. *Survey errors and survey costs,* John Wiley & Sons.
GRUSZKA, K. 2017. Framing the collaborative economy —Voices of contestation. *Environmental Innovation and Societal Transitions,* 23**,** 92-104.
GUBA, E. G. & LINCOLN, Y. S. 1994. Competing paradigms in qualitative research. *Handbook of qualitative research,* 2**,** 105.
GULLSTRAND EDBRING, E., LEHNER, M. & MONT, O. 2016. Exploring consumer attitudes to alternative models of consumption: motivations and barriers. *Journal of Cleaner Production,* 123**,** 5-15.
GUPTA, M., ESMAEILZADEH, P., UZ, I. & TENNANT, V. M. 2019. The effects of national cultural values on individuals' intention to participate in peer-to-peer sharing economy. *Journal of Business Research,* 97**,** 20-29.
GUYADER, H. 2018. No one rides for free! Three styles of collaborative consumption. *Journal of Services Marketing,* 32**,** 692-714.
GYAPONG, E., KHAGHAANY, M. M. & AHMED, A. 2020. The asymmetric role of corporate governance in CEO pay determination: evidence from South Africa. *Applied Economics,* 52**,** 671-693.
HA, Y. W. & PARK, M. C. 2013. Antecedents of customer satisfaction and customer loyalty for emerging devices in the initial market of Korea: An equity framework. *Psychology & Marketing,* 30**,** 676-689.
HAIR, J. F. 2014. *Multivariate data analysis*, Harlow, Essex : Prentice Hall.
HAIR, J. F., BLACK, W. C., BABIN, B. J. & ANDERSON, R. E. 2014. Multivariate data analysis: Pearson new international edition. *Essex: Pearson Education Limited*.
HAIR, J. F., BLACK, W. C., BABIN, B. J., ANDERSON, R. E. & TATHAM, R. L. 2006. Multivariate data analysis (Vol. 6). Upper Saddle River, NJ: Pearson Prentice Hall.
HALLOCK, D. E., SALAZAR, R. J. & VENNEMAN, S. 2004. Demographic and attitudinal correlates of employee satisfaction with an ESOP. *British Journal of Management,* 15**,** 321-333.
HAMARI, J. 2013. Transforming homo economicus into homo ludens: A field experiment on gamification in a utilitarian peer-to-peer trading service. *Electronic Commerce Research and Applications,* 12**,** 236-245.
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*.
HAMARI, J., SJÖKLINT, M. & UKKONEN, A. 2016. The sharing economy: Why people participate in collaborative consumption. *Journal of the Association for Information Science and Technology,* 67**,** 2047-2059.
HAMON, R. & BULL, K. S. 2016. What do you have to offer me?": A relationship building activity for demonstrating social exchange theory.

HAN, D., DUHACHEK, A. & AGRAWAL, N. 2016. Coping and construal level matching drives health message effectiveness via response efficacy or self-efficacy enhancement. *Journal of Consumer Research,* 43**,** 429-447.
HANEY, C. J. & LONG, B. C. 1995. Coping Effectiveness: A Path Analysis of Self-Efficacy, Control, Coping, and Performance in Sport Competitions 1. *Journal of Applied Social Psychology,* 25**,** 1726-1746.
HART, T. A., DAVID, P., SHAO, F., FOX, C. J. & WESTERMANN-BEHAYLO, M. 2015. An examination of the impact of executive compensation disparity on corporate social performance. *Strategic Organization,* 13**,** 200-223.
HARTL, B., HOFMANN, E. & KIRCHLER, E. 2016. Do we need rules for "what's mine is yours"? Governance in collaborative consumption communities. *Journal of Business Research,* 69**,** 2756-2763.
HARVEY, J., SMITH, A. & GOLIGHTLY, D. 2014a. Giving and sharing in the computer-mediated economy. *Journal of Consumer Behaviour***,** n/a-n/a.
HARVEY, J., SMITH, A. & GOLIGHTLY, D. 2014b. Giving and sharing in the computer-mediated economy. *Journal of Consumer Behaviour,* 16**,** 363-371.
HARVEY, J., SMITH, A., GOLIGHTLY, D., GOULDING, J. & GALLAGE, S. 2020. Prosocial exchange systems: Nonreciprocal giving, lending, and skill-sharing. *Computers in Human Behavior,* 107**,** 106268.
HARVEY, J., SMITH, A., GOULDING, J. & ILLODO, I. B. 2019. Food sharing, redistribution, and waste reduction via mobile applications: A social network analysis. *Industrial Marketing Management*.
HASLAM, S. A., POWELL, C. & TURNER, J. 2000. Social identity, self-categorization, and work motivation: rethinking the contribution of the group to positive and sustainable organisational outcomes. *Applied Psychology,* 49**,** 319-339.
HAWLITSCHEK, F., TEUBNER, T. & GIMPEL, H. Understanding the Sharing Economy--Drivers and Impediments for Participation in Peer-to-Peer Rental. System Sciences (HICSS), 2016 49th Hawaii International Conference on, 2016. IEEE, 4782-4791.
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**,** 891-906.
HEO, C. Y. 2016. Sharing economy and prospects in tourism research. *Annals of Tourism Research,* 58**,** 166-170.
HERBERT, M. & COLLIN-LACHAUD, I. 2016. Collaborative practices and consumerist habitus: An analysis of the transformative mechanisms of collaborative consumption. *Recherche et Applications en Marketing (English Edition),* 32**,** 40-60.
HERRIOT, P., GIBBONS, P., PEMBERTON, C. & JACKSON, P. R. 1994. An empirical model of managerial careers in organizations. *British Journal of Management,* 5**,** 113-121.
HERRNSTEIN, R. J. 1990. Rational choice theory: Necessary but not sufficient. *American Psychologist,* 45**,** 356.
HESS, T. J., JOSHI, K. & MCNAB, A. L. 2010. An alternative lens for understanding technology acceptance: An equity comparison perspective. *Journal of Organizational Computing and Electronic Commerce,* 20**,** 123-154.
HEYLIGHEN, F. 2017. Towards an intelligent network for matching offer and demand: From the sharing economy to the global brain. *Technological Forecasting and Social Change,* 114**,** 74-85.
HIBBERTS, M., JOHNSON, R. B. & HUDSON, K. 2012. Common survey sampling techniques. *Handbook of survey methodology for the social sciences.* Springer.
HIGHHOUSE, S. E., DIAB, D. L. & GILLESPIE, M. A. 2008. Are maximizers really unhappy? The measurement of maximizing tendency. *Judgment and Decision Making Journal,* 3**,** 364.

HOBSON, K. & LYNCH, N. 2016. Diversifying and de-growing the circular economy: Radical social transformation in a resource-scarce world. *Futures,* 82**,** 15-25.
HOFFMAN, E. & SPITZER, M. L. 1985. Entitlements, rights, and fairness: An experimental examination of subjects' concepts of distributive justice. *The Journal of Legal Studies,* 14**,** 259-297.
HOGREVE, J., BILSTEIN, N. & MANDL, L. 2017. Unveiling the recovery time zone of tolerance: When time matters in service recovery. *Journal of the Academy of Marketing Science,* 45**,** 866-883.
HOLBROOK, M. B. & CORFMAN, K. P. 1985. Quality and value in the consumption experience: Phaedrus rides again. *Perceived quality,* 31**,** 31-57.
HOMANS, G. C. 1953. Status among clerical workers. *Human Organization,* 12**,** 5-10.
HOMANS, G. C. 1961. Human behavior: Its elementary forms. New York: Harcourt, Brace.
HOMANS, G. C. 1974. Social behaviour: its elementary forms (revised). *New York, NY.*
HONG, J., SHIN, J. & LEE, D. 2016. Strategic management of next-generation connected life: Focusing on smart key and car-home connectivity. *Technological Forecasting and Social Change,* 103**,** 11-20.
HONG, S. & VICDAN, H. 2016. Re-imagining the utopian: Transformation of a sustainable lifestyle in ecovillages. *Journal of Business Research,* 69**,** 120-136.
HORNEY, N. 2016. The Gig Economy: A Disruptor Requiring HR Agility. *People & Strategy,* 39**,** 20-27.
HSIEH, H.-F. & SHANNON, S. E. 2005. Three approaches to qualitative content analysis. *Qualitative health research,* 15**,** 1277-1288.
HUANG, Y.-H., LEE, J., MCFADDEN, A. C., MURPHY, L. A., ROBERTSON, M. M., CHEUNG, J. H. & ZOHAR, D. 2016. Beyond safety outcomes: An investigation of the impact of safety climate on job satisfaction, employee engagement and turnover using social exchange theory as the theoretical framework. *Applied ergonomics,* 55**,** 248-257.
HUBER, A. 2017. Theorising the dynamics of collaborative consumption practices: A comparison of peer-to-peer accommodation and cohousing. *Environmental Innovation and Societal Transitions,* 23**,** 53-69.
HUSEMAN, R. C., HATFIELD, J. D. & MILES, E. W. 1987. A new perspective on equity theory: The equity sensitivity construct. *Academy of management Review,* 12**,** 222-234.
HUXLEY, P., EVANS, S., MADGE, S., WEBBER, M., BURCHARDT, T., MCDAID, D. & KNAPP, M. 2012. Development of a social inclusion index to capture subjective and objective life domains (phase II): Psychometric development study. *Health Technology Assessment,* 16**,** 1-248.
HWANG, J. & GRIFFITHS, A. M. 2017. Share more, drive less: Millennials value perception and behavioral intent in using collaborative consumption services. *Journal of Consumer Marketing,* 34**,** 132-146.
IYENGAR, S. S., WELLS, R. E. & SCHWARTZ, B. 2006. Doing better but feeling worse: Looking for the "best" job undermines satisfaction. *Psychological Science,* 17**,** 143-150.
JANE, W.-J., SAN, G. & OU, Y.-P. 2009. The causality between salary structures and team performance: A panel analysis in a professional baseball league. *International Journal of Sport Finance,* 4**,** 136-150.
JANSSEN, O. 2001. Fairness perceptions as a moderator in the curvilinear relationships between job demands, and job performance and job satisfaction. *Academy of management journal,* 44**,** 1039-1050.
JOHNSON, D. W. & JOHNSON, R. T. 2002. Cooperative learning and social interdependence theory. *Theory and research on small groups.* Springer.
JOHNSON, R. B. & ONWUEGBUZIE, A. J. 2004. Mixed methods research: A research paradigm whose time has come. *Educational researcher,* 33**,** 14-26.
JOHNSTON, A. C. & WARKENTIN, M. 2010. Fear appeals and information security behaviors: an empirical study. *MIS quarterly***,** 549-566.
JONES, M. A., REYNOLDS, K. E. & ARNOLD, M. J. 2006. Hedonic and utilitarian shopping value: Investigating differential effects on retail outcomes. *Journal of business research,* 59**,** 974-981.

KANKANHALLI, A., TAN, B. C. Y. & WEI, K.-K. 2005. Contributing knowledge to electronic knowledge repositories: an empirical investigation. *MIS quarterly*, 113-143.
KANNAN, P. 2017. Digital marketing: A framework, review and research agenda. *International Journal of Research in Marketing,* 34**,** 22-45.
KANWAL, S., RASHEED, M. I., PITAFI, A. H., PITAFI, A. & REN, M. 2020. Road and transport infrastructure development and community support for tourism: The role of perceived benefits, and community satisfaction. *Tourism Management,* 77**,** 104014.
KARATEPE, O. M. 2010. The effect of positive and negative work-family interaction on exhaustion. *International Journal of Contemporary Hospitality Management*.
KARATEPE, O. M., YORGANCI, I. & HAKTANIR, M. 2009. Outcomes of customer verbal aggression among hotel employees. *International Journal of Contemporary Hospitality Management*.
KARIMI, S., HOLLAND, C. P. & PAPAMICHAIL, K. N. 2018. The impact of consumer archetypes on online purchase decision-making processes and outcomes: A behavioural process perspective. *Journal of Business Research,* 91**,** 71-82.
KARLSSON, L., KEMPERMAN, A. & DOLNICAR, S. 2017. May I sleep in your bed? Getting permission to book. *Annals of Tourism Research,* 62**,** 1-12.
KARP, D., JIN, N., YAMAGISHI, T. & SHINOTSUKA, H. 1993. Raising the minimum in the minimal group paradigm. *The Japanese Journal of Experimental Social Psychology,* 32**,** 231-240.
KATHAN, W., MATZLER, K. & VEIDER, V. 2016. The sharing economy: Your business model's friend or foe? *Business Horizons,* 59**,** 663-672.
KATYAL, K., KANETKAR, V. & PATRO, S. 2019. What is a fair fare? Exploring the differences between perceived price fairness and perceived price unfairness. *Journal of Revenue and Pricing Management,* 18**,** 133-146.
KELEMEN, M. L. & RUMENS, N. 2008. *An introduction to critical management research,* Sage.
KENNEDY, J. 2016. Conceptual boundaries of sharing. *Information, Communication & Society,* 19**,** 461-474.
KIM, J., YOON, Y. & ZO, H. Why People Participate in the Sharing Economy: A Social Exchange Perspective. PACIS, 2015. 76.
KIM, S., LEE, K. Y., KOO, C. & YANG, S.-B. 2017. Examining the influencing factors of intention to share accommodations in online hospitality exchange networks. *Journal of Travel & Tourism Marketing***,** 1-16.
KIM, S. & YOON, Y. 2016. Recommendation system for sharing economy based on multidimensional trust model. *Multimedia Tools and Applications,* 75**,** 15297-15310.
KING JR, W. C. & MILES, E. W. 1994. The measurement of equity sensitivity. *Journal of Occupational and Organizational Psychology,* 67**,** 133-142.
KING JR, W. C., MILES, E. W. & DAY, D. D. 1993. A test and refinement of the equity sensitivity construct. *Journal of Organizational Behavior,* 14**,** 301-317.
KING, S. P. 2015. Sharing Economy: What Challenges for Competition Law? *Journal of European Competition Law & Practice,* 6**,** 729-734.
KNOTE, R. & BLOHM, I. 2016. Deconstructing the Sharing Economy: On the relevance for IS research.
KOTHARI, C. R. 2004. *Research methodology: Methods and techniques*, New Age International.
KOTSIANTIS, S. B., ZAHARAKIS, I. & PINTELAS, P. 2007. Supervised machine learning: A review of classification techniques.
KOWALCZYK, D. 2015. Purposes of research: exploratory, descriptive & explanatory. *Academic. Psychology,* 105.
KROSNICK, J. A. 1991. Response strategies for coping with the cognitive demands of attitude measures in surveys. *Applied cognitive psychology,* 5**,** 213-236.
KUMAR, V., LAHIRI, A. & DOGAN, O. B. 2018. A strategic framework for a profitable business model in the sharing economy. *Industrial Marketing Management,* 69**,** 147-160.

KWON, O. & WEN, Y. 2010. An empirical study of the factors affecting social network service use. *Computers in human behavior,* 26**,** 254-263.
LAAMANEN, M., WAHLEN, S. & CAMPANA, M. 2015. Mobilising collaborative consumption lifestyles: a comparative frame analysis of time banking. *International Journal of Consumer Studies,* 39**,** 459-467.
LAAMANEN, M., WAHLEN, S. & LOREK, S. 2018. A moral householding perspective on the sharing economy. *Journal of Cleaner Production,* 202**,** 1220-1227.
LACZNIAK, R. N., DECARLO, T. E. & RAMASWAMI, S. N. 2001. Consumers' responses to negative word-of-mouth communication: An attribution theory perspective. *Journal of consumer Psychology,* 11**,** 57-73.
LAI, L. 2010. Maximizing without difficulty: A modified maximizing scale and its correlates. *Judgment and Decision making,* 5**,** 164.
LAI, P.-H., CHUANG, S.-T., ZHANG, M.-C. & NEPAL, S. K. 2020. The non-profit sharing economy from a social exchange theory perspective: a case from World Wide Opportunities on Organic Farms in Taiwan. *Journal of Sustainable Tourism,* 28**,** 1970-1987.
LAMBERTON, C. 2016. Collaborative consumption: a goal-based framework. *Current Opinion in Psychology,* 10**,** 55-59.
LAMPINEN, A., HUOTARI, K. & CHESHIRE, C. 2015. Challenges to Participation in the Sharing Economy: The Case of Local Online Peer-to-Peer Exchange in a Single Parents' Network. *IxD&A,* 24**,** 16-32.
LASTNER, M. M., FENNELL, P., FOLSE, J. A., RICE, D. H. & PORTER III, M. 2019. I guess that is fair: How the efforts of other customers influence buyer price fairness perceptions. *Psychology & Marketing*.
LÄTTMAN, K., FRIMAN, M. & OLSSON, L. E. 2016. Perceived accessibility of public transport as a potential indicator of social inclusion. *Social Inclusion,* 4**,** 36-45.
LAURELL, C. & SANDSTRÖM, C. 2016. Analysing Uber In Social Media—Disruptive Technology Or Institutional Disruption? *International Journal of Innovation Management,* 20**,** 1640013.
LAWRENCE, S. A. & CALLAN, V. J. 2011. The role of social support in coping during the anticipatory stage of organizational change: A test of an integrative model. *British Journal of Management,* 22**,** 567-585.
LAZARUS, R. S. 1998. The stress and coping paradigm. *Fifty years of the research and theory of RS Lazarus: An analysis of historical and perennial Issues***,** 182-220.
LEANA, C. R. & PIL, F. K. 2006. Social capital and organizational performance: Evidence from urban public schools. *Organization Science,* 17**,** 353-366.
LEE, C., LEE, H., LEE, J. & PARK, J. 2014. A multiple group analysis of the training transfer model: exploring the differences between high and low performers in a Korean insurance company. *The International Journal of Human Resource Management,* 25**,** 2837-2857.
LEE, S. & KIM, D.-Y. 2017. Brand personality of Airbnb: application of user involvement and gender differences. *Journal of Travel & Tourism Marketing***,** 1-14.
LERNER, C. F. & KENNEDY, L. T. 2000. Stay–leave decision making in battered women: Trauma, coping and self-efficacy. *Cognitive Therapy and Research,* 24**,** 215-232.
LESSIG, L. 2008. *Remix: Making art and commerce thrive in the hybrid economy,* Penguin.
LEVENTHAL, G. S. 1976. The distribution of rewards and resources in groups and organizations. *Advances in experimental social psychology.* Elsevier.
LEVENTHAL, G. S. 1980. What should be done with equity theory? *Social exchange.* Springer.
LEWICKI, R. J. & BUNKER, B. B. 1996. Developing and maintaining trust in work relationships. *Trust in organizations: Frontiers of theory and research,* 114**,** 139.
LI, S. & LIN, B. 2006. Accessing information sharing and information quality in supply chain management. *Decision support systems,* 42**,** 1641-1656.

LI, Y., WANG, X., LIN, X. & HAJLI, M. 2018. Seeking and sharing health information on social media: A net valence model and cross-cultural comparison. *Technological Forecasting and Social Change,* 126**,** 28-40.
LIANG, H. & XUE, Y. 2009. Avoidance of information technology threats: a theoretical perspective. *MIS quarterly***,** 71-90.
LIANG, H., XUE, Y., PINSONNEAULT, A. & WU, Y. 2019. What Users Do Besides Problem-Focused Coping When Facing IT Security Threats: An Emotion-Focused Coping Perspective. *MIS Quarterly,* 43.
LIANG, L. J., CHOI, H. C. & JOPPE, M. 2017. Understanding repurchase intention of Airbnb consumers: perceived authenticity, electronic word-of-mouth, and price sensitivity. *Journal of Travel & Tourism Marketing***,** 1-17.
LINDBLOM, A., LINDBLOM, T. & WECHTLER, H. 2018. Collaborative consumption as C2C trading: Analyzing the effects of materialism and price consciousness. *Journal of Retailing and Consumer Services,* 44**,** 244-252.
LIU, X. & VARSHNEY, U. 2020. Mobile health: A carrot and stick intervention to improve medication adherence. *Decision Support Systems,* 128**,** 113165.
LIU, X. & WAYNE XU, W. 2019. Adoption of ride-sharing apps by Chinese taxi drivers and its implication for the equality and wellbeing in the sharing economy. *Chinese Journal of Communication,* 12**,** 7-24.
LIU, Z. & BROCKNER, J. 2015. The interactive effect of positive inequity and regulatory focus on work performance. *Journal of Experimental Social Psychology,* 57**,** 111-116.
LIU, Z., MIN, Q., ZHAI, Q. & SMYTH, R. 2016. Self-disclosure in Chinese micro-blogging: A social exchange theory perspective. *Information & Management,* 53**,** 53-63.
LLAMAS, R. & BELK, R. W. 2013. Living in a digital world. *The Routledge Companion to Digital Consumption. New York, NY: Routledge*.
LOCKE, E. A., NOORDERHAVEN, N. G., CANNON, J. P., DONEY, P. M. & MULLEN, M. R. 1999. Some reservations about social capital. *Academy of Management Review,* 24**,** 8-11.
LOMBARDI, P. & SCHWABE, F. 2017. Sharing economy as a new business model for energy storage systems. *Applied Energy,* 188**,** 485-496.
LONG, B. C. 1989. SEX-ROLE ORIENTATION, COPING STRATEGIES, AND SELF-EFFICACY OF WOMEN IN TRADITIONAL AND NON T RADITIONAL OCCUPATIONS. *Psychology of Women Quarterly,* 13**,** 307-324.
LU, L., CAI, R. & KING, C. 2020. Building trust through a personal touch: Consumer response to service failure and recovery of home-sharing. *Journal of Business Research,* 117**,** 99-111.
LU, Y., PAPAGIANNIDIS, S. & ALAMANOS, E. 2019. Exploring the emotional antecedents and outcomes of technology acceptance. *Computers in Human Behavior,* 90**,** 153-169.
LUHTANEN, R. & CROCKER, J. 1992. A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and social psychology bulletin,* 18**,** 302-318.
LUTZ, C., HOFFMANN, C. P., BUCHER, E. & FIESELER, C. 2018. The role of privacy concerns in the sharing economy. *Information, Communication & Society,* 21**,** 1472-1492.
LUTZ, C. & NEWLANDS, G. 2018. Consumer segmentation within the sharing economy: The case of Airbnb. *Journal of Business Research,* 88**,** 187-196.
MACKENZIE, S. B. & PODSAKOFF, P. M. 2012. Common method bias in marketing: Causes, mechanisms, and procedural remedies. *Journal of retailing,* 88**,** 542-555.
MACKENZIE, S. B., PODSAKOFF, P. M. & FETTER, R. 1991. Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salespersons' performance. *Organizational behavior and human decision processes,* 50**,** 123-150.
MACKENZIE, S. B., PODSAKOFF, P. M. & FETTER, R. 1993. The impact of organizational citizenship behavior on evaluations of salesperson performance. *Journal of marketing,* 57**,** 70-80.

MAIR, J. & REISCHAUER, G. 2017. Capturing the dynamics of the sharing economy: Institutional research on the plural forms and practices of sharing economy organizations. *Technological Forecasting and Social Change,* 125**,** 11-20.
MALC, D., MUMEL, D. & PISNIK, A. 2016. Exploring price fairness perceptions and their influence on consumer behavior. *Journal of Business Research,* 69**,** 3693-3697.
MALIN, B. J. & CHANDLER, C. 2017. Free to Work Anxiously: Splintering Precarity Among Drivers for Uber and Lyft. *Communication, Culture & Critique,* 10**,** 382-400.
MANO, H. & OLIVER, R. L. 1993. Assessing the dimensionality and structure of the consumption experience: evaluation, feeling, and satisfaction. *Journal of Consumer research,* 20**,** 451-466.
MARTIN, C. J. 2016. The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism? *Ecological Economics,* 121**,** 149-159.
MARTIN, C. J. & UPHAM, P. 2016. Grassroots social innovation and the mobilisation of values in collaborative consumption: a conceptual model. *Journal of Cleaner Production,* 134, Part A**,** 204-213.
MARTIN, C. J., UPHAM, P. & BUDD, L. 2015. Commercial orientation in grassroots social innovation: Insights from the sharing economy. *Ecological Economics,* 118**,** 240-251.
MARWELL, G., OLIVER, P. E. & PRAHL, R. 1988. Social networks and collective action: A theory of the critical mass. III. *American Journal of Sociology,* 94**,** 502-534.
MATTEO, C. & DANIELE, D. 2014. Gift-giving, sharing and commodity exchange at Bookcrossing.com: new insights from a qualitative analysis. *Management Decision,* 52**,** 755-776.
MAURI, A. G., MINAZZI, R., NIETO-GARCÍA, M. & VIGLIA, G. 2018. Humanize your business. The role of personal reputation in the sharing economy. *International Journal of Hospitality Management,* 73**,** 36-43.
MAZAREANU, E. 2018a. *Projected compound annual growth rate (CAGR) of the sharing economy worldwide between 2013 and 2025*, by sector* [Online]. Statista. Available: https://www-statista-com.libproxy.ncl.ac.uk/statistics/831111/projected-annual-growth-rate-of-key-sharing-economy-sectors/ [Accessed].
MAZAREANU, E. 2018b. *Revenue distribution in the sharing economy worldwide in 2022, by region* [Online]. Statista. Available: https://www-statista-com.libproxy.ncl.ac.uk/statistics/878907/sharing-economy-revenue-share-region/ [Accessed].
MCARTHUR, E. 2015. Many-to-many exchange without money: why people share their resources. *Consumption Markets & Culture,* 18**,** 239-256.
MCFARLIN, D. B. & SWEENEY, P. D. 1992. Distributive and procedural justice as predictors of satisfaction with personal and organizational outcomes. *Academy of management Journal,* 35**,** 626-637.
MCQUEENEY, D. A., STANTON, A. L. & SIGMON, S. 1997. Efficacy of Emotion-Focused and Problem-Focused Group Therapies for Women with Fertility Problems. *Journal of behavioral medicine,* 20**,** 313-331.
MERTON, T. A. J., M 2015. The Sharing Economy : Consumer Intelligence Series.
MILANOVA, V. & MAAS, P. 2017. Sharing intangibles: Uncovering individual motives for engagement in a sharing service setting. *Journal of Business Research,* 75**,** 159-171.
MILES, E. W., HATFIELD, J. D. & HUSEMAN, R. C. 1994. Equity sensitivity and outcome importance. *Journal of Organizational Behavior,* 15**,** 585-596.
MILLER, S. R. 2016. First principles for regulating the sharing economy. *Browser Download This Paper*.
MIN, S., SO, K. K. F. & JEONG, M. 2018. Consumer adoption of the Uber mobile application: Insights from diffusion of innovation theory and technology acceptance model. *Journal of Travel & Tourism Marketing***,** 1-14.
MIN, W. & LU, L. Who Wants to Live Like a Local?: An Analysis of Determinants of Consumers' Intention to Choose AirBNB. 2017 International Conference on Management Science and Engineering (ICMSE), 2017. IEEE, 642-651.

MITCHELL, M. L. & JOLLEY, J. M. 2012. *Research design explained*, Cengage Learning.
MITCHELL, M. S., CROPANZANO, R. S. & QUISENBERRY, D. M. 2012. Social exchange theory, exchange resources, and interpersonal relationships: A modest resolution of theoretical difficulties. *Handbook of social resource theory.* Springer.
MITTENDORF, C. 2018. Collaborative consumption: the role of familiarity and trust among millennials. *Journal of Consumer Marketing,* 35**,** 377-391.
MODY, M., HANKS, L. & DOGRU, T. 2019. Parallel pathways to brand loyalty: Mapping the consequences of authentic consumption experiences for hotels and Airbnb. *Tourism Management,* 74**,** 65-80.
MÖHLMANN, M. 2015. Collaborative consumption: determinants of satisfaction and the likelihood of using a sharing economy option again. *Journal of Consumer Behaviour,* 14**,** 193-207.
MOLM, L. D. 1997. *Coercive power in social exchange,* Cambridge University Press.
MOORMAN, R. H. 1991. Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of applied psychology,* 76**,** 845.
MORALES, A. C. 2005. Giving firms an "E" for effort: Consumer responses to high-effort firms. *Journal of Consumer Research,* 31**,** 806-812.
MORGAN, B. & KUCH, D. 2015. Radical Transactionalism: Legal Consciousness, Diverse Economies, and the Sharing Economy. *Journal of Law and Society,* 42**,** 556-587.
MORGAN, D. L. 2007. Paradigms lost and pragmatism regained: Methodological implications of combining qualitative and quantitative methods. *Journal of mixed methods research,* 1**,** 48-76.
MOSTAFA, A. M. S. & BOTTOMLEY, P. A. 2018. Self-sacrificial leadership and employee behaviours: An examination of the role of organizational social capital. *Journal of Business Ethics***,** 1-12.
MUNKØE, M. M. 2017. Regulating the European Sharing Economy: State of Play and Challenges. *Intereconomics,* 52**,** 38-44.
MUNOZ, P. & COHEN, B. 2017. Mapping out the sharing economy: A configurational approach to sharing business modeling. *Technological Forecasting and Social Change,* 125**,** 21-37.
MURILLO, D., BUCKLAND, H. & VAL, E. 2017. When the sharing economy becomes neoliberalism on steroids: Unravelling the controversies. *Technological Forecasting and Social Change,* 125**,** 66-76.
MYERS, S. A., GOODBOY, A. K. & 201, M. O. C. 2013. Using equity theory to explore adult siblings' use of relational maintenance behaviors and relational characteristics. *Communication Research Reports,* 30**,** 275-281.
NAHAPIET, J. & GHOSHAL, S. 1998. Social capital, intellectual capital, and the organizational advantage. *Academy of management review,* 23**,** 242-266.
NASTASI, B. K., HITCHCOCK, J. H. & BROWN, L. M. 2010. An inclusive framework for conceptualizing mixed methods design typologies: Moving toward fully integrated synergistic research models. *Handbook of mixed methods in social & behavioral research,* 2**,** 305-338.
NDUBISI, N. O., EHRET, M. & WIRTZ, J. 2016. Relational Governance Mechanisms and Uncertainties in Nonownership Services. *Psychology & Marketing,* 33**,** 250-266.
NEUMAN, W. L. 2014. *Basics of social research,* Pearson/Allyn and Bacon.
NEWMAN, I., BENZ, C. R. & RIDENOUR, C. S. 1998. *Qualitative-quantitative research methodology: Exploring the interactive continuum,* SIU Press.
NGUYEN, S., ALAOUI, M. D. & LLOSA, S. 2020. When interchangeability between providers and users makes a difference: The mediating role of social proximity in collaborative services. *Journal of Business Research*.
OKUN, M. A., STOCK, W. A., HARING, M. J. & WITTER, R. A. 1984. The social activity/subjective well-being relation: A quantitative synthesis. *Research on Aging,* 6**,** 45-65.
OSBORNE, J. W. & WATERS, E. 2002. Four assumptions of multiple regression that researchers should always test. *Practical assessment, research, and evaluation,* 8**,** 2.

OSKAM, J. & BOSWIJK, A. 2016. Airbnb: the future of networked hospitality businesses. *Journal of Tourism Futures,* 2**,** 22-42.
PANTANO, E. & STYLOS, N. 2020. The Cinderella moment: Exploring consumers' motivations to engage with renting as collaborative luxury consumption mode. *Psychology & Marketing,* 37**,** 740-753.
PARK, J. & HA, S. 2016. Co-creation of service recovery: Utilitarian and hedonic value and post-recovery responses. *Journal of Retailing and Consumer Services,* 28**,** 310-316.
PATTON, M. Q. 1990. *Qualitative evaluation and research methods*, SAGE Publications, inc.
PAZAITIS, A., DE FILIPPI, P. & KOSTAKIS, V. 2017. Blockchain and value systems in the sharing economy: The illustrative case of Backfeed. *Technological Forecasting and Social Change,* 125**,** 105-115.
PETTY, R. E. & CACIOPPO, J. T. 1986. The elaboration likelihood model of persuasion. *Communication and persuasion.* Springer.
PFEFFER-GILLETT, A. 2016. When disruption collides with accountability: holding ridesharing companies liable for acts of their drivers. *Cal. L. Rev.,* 104**,** 233.
PICCOLI, B. & DE WITTE, H. 2015. Job insecurity and emotional exhaustion: Testing psychological contract breach versus distributive injustice as indicators of lack of reciprocity. *Work & Stress,* 29**,** 246-263.
PILLAI, K. G., HODGKINSON, G. P., KALYANARAM, G. & NAIR, S. R. 2017. The negative effects of social capital in organizations: A review and extension. *International Journal of Management Reviews,* 19**,** 97-124.
PISCICELLI, L., COOPER, T. & FISHER, T. 2015. 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.
PODSAKOFF, P. M., MACKENZIE, S. B., LEE, J.-Y. & PODSAKOFF, N. P. 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology,* 88**,** 879.
POSEN, H. A. 2015. Ridesharing in the Sharing Economy: Should Regulators Impose Uber Regulations on Uber. *Iowa L. Rev.,* 101**,** 405.
POTTINGER, L. 2018. Growing, guarding and generous exchange in an analogue sharing economy. *Geoforum,* 96**,** 108-118.
PRIPORAS, C.-V., STYLOS, N., RAHIMI, R. & VEDANTHACHARI, L. N. 2017. Unraveling the diverse nature of service quality in a sharing economy: A social exchange theory perspective of Airbnb accommodation. *International Journal of Contemporary Hospitality Management,* 29**,** 2279-2301.
PUTNAM, R. D. 1995. Tuning in, tuning out: The strange disappearance of social capital in America. *PS: Political science & politics,* 28**,** 664-684.
PYKA, A. 2017. Dedicated innovation systems to support the transformation towards sustainability: creating income opportunities and employment in the knowledge-based digital bioeconomy. *Journal of Open Innovation: Technology, Market, and Complexity,* 3**,** 27.
RABBIE, J. M., SCHOT, J. C. & VISSER, L. 1989. Social identity theory: A conceptual and empirical critique from the perspective of a behavioural interaction model. *European Journal of Social Psychology,* 19**,** 171-202.
RAGIN, C. C. 2014. Comparative Method : Moving Beyond Qualitative and Quantitative Strategies. 1 ed.: University of California Press.
RAWLS, J. 2009. *A theory of justice*, Harvard university press.
REDFEARN III, R. L. 2016. SHARING ECONOMY MISCLASSIFICATION: EMPLOYEES AND INDEPENDENT CONTRACTORS IN TRANSPORTATION NETWORK COMPANIES. *Berkeley Technology Law Journal,* 31**,** 1023-1056.

RESTUBOG, S. L. D., BORDIA, P. & TANG, R. L. 2007. Behavioural outcomes of psychological contract breach in a non-western culture: The moderating role of equity sensitivity. *British Journal of Management,* 18**,** 376-386.
RETAMAL, M. 2017. Product-service systems in Southeast Asia: Business practices and factors influencing environmental sustainability. *Journal of Cleaner Production,* 143**,** 894-903.
RICHARD, B. & CLEVELAND, S. 2016. The future of hotel chains. *Journal of Vacation Marketing,* 22**,** 239-248.
RICHARDSON, H. A., SIMMERING, M. J. & STURMAN, M. C. 2009. A tale of three perspectives: Examining post hoc statistical techniques for detection and correction of common method variance. *Organizational Research Methods,* 12**,** 762-800.
RICHARDSON, L. 2015. Performing the sharing economy. *Geoforum,* 67**,** 121-129.
RICHARDSON, L. & LE GRAND, J. 2002. Outsider and insider expertise: the response of residents of deprived neighbourhoods to an academic definition of social exclusion. *Social Policy & Administration,* 36**,** 496-515.
RIEMENSCHNEIDER, C. K., HARRISON, D. A. & MYKYTYN, P. P. 2003. Understanding IT adoption decisions in small business: integrating current theories. *Information & management,* 40**,** 269-285.
RIFF, D., LACY, S. & FICO, F. 2013. *Analyzing Media Messages*, Routledge.
RIFKIN, J. 2001. *The age of access: The new culture of hypercapitalism*, Penguin.
RINTAMÄKI, T., KANTO, A., KUUSELA, H. & SPENCE, M. T. 2006. Decomposing the value of department store shopping into utilitarian, hedonic and social dimensions: Evidence from Finland. *International Journal of Retail & Distribution Management,* 34**,** 6-24.
RIPPETOE, P. A. & ROGERS, R. W. 1987. Effects of components of protection-motivation theory on adaptive and maladaptive coping with a health threat. *Journal of personality and social psychology,* 52**,** 596.
ROSENBLAT, A. & STARK, L. 2016. Algorithmic Labor and Information Asymmetries: A Case Study of Uber's Drivers. 3758–3784.
ROSETTE, A. S. & KOVAL, C. Z. 2018. Framing advantageous inequity with a focus on others: A catalyst for equity restoration. *Journal of Experimental Social Psychology,* 76**,** 283-289.
RÓZYCKA, M. 2016. Collaborative consumption - a new trend in the economy. *World Scientific News,* 48**,** 188-192.
RUBENSTEIN, A. L., ALLEN, D. G. & BOSCO, F. A. 2019. What's past (and present) is prologue: Interactions between justice levels and trajectories predicting behavioral reciprocity. *Journal of Management,* 45**,** 1569-1594.
RUDDEN, J. 2020. *Highest valued unicorn companies worldwide 2020* [Online]. Statista. Available: https://www-statista-com.libproxy.ncl.ac.uk/statistics/407888/ranking-of-highest-valued-startup-companies-worldwide/ [Accessed].
SAATCIOGLU, B. & OZANNE, J. L. 2013. A critical spatial approach to marketplace exclusion and inclusion. *Journal of Public Policy & Marketing,* 32**,** 32-37.
SAHLINS, M. D. 1974. *Stone age economics*, Transaction Publishers.
SAUNDERS, M. N. 2011. *Research methods for business students, 5/e*, Pearson Education India.
SCARABOTO, D. 2015. Selling, sharing, and everything in between: The hybrid economies of collaborative networks. *Journal of Consumer Research,* 42**,** 152-176.
SCHNEIDER, D. Rewarding prosociality on non-commercial online sharing platforms. the 25th European Conference on Information Systems (ECIS), 2017 Guimarães, Portugal. 2269-2284.
SCHOR, J. B., FITZMAURICE, C., CARFAGNA, L. B., ATTWOOD-CHARLES, W. & POTEAT, E. D. 2016. Paradoxes of openness and distinction in the sharing economy. *Poetics,* 54**,** 66-81.
SCHOR, J. B. & FITZMAURICE, C. J. 2015. 26. Collaborating and connecting: the emergence of the sharing economy. *Handbook of research on sustainable consumption,* 410.
SCHREINER, N., PICK, D. & KENNING, P. 2018. To share or not to share? Explaining willingness to share in the context of social distance. *Journal of Consumer Behaviour,* 17**,** 366-378.

SCHWANDT, T. A. 1994. Constructivist, interpretivist approaches to human inquiry. *Handbook of qualitative research,* 1**,** 118-137.
SCHWARTZ, B. The paradox of choice: Why more is less. 2004. Ecco New York.
SCHWARTZ, B., WARD, A., MONTEROSSO, J., LYUBOMIRSKY, S., WHITE, K. & LEHMAN, D. R. 2002. Maximizing versus satisficing: Happiness is a matter of choice. *Journal of personality and social psychology,* 83**,** 1178.
SENIK, C. 2003. What can we learn from subjective data? The case of income and well-being. DELTA (Ecole normale supérieure).
SHAHEEN, S. & CHAN, N. 2016. Mobility and the sharing economy: Potential to facilitate the first-and last-mile public transit connections. *Built Environment,* 42**,** 573-588.
SHAHEEN, S. A., CHAN, N. D. & GAYNOR, T. 2016. Casual carpooling in the San Francisco Bay Area: Understanding user characteristics, behaviors, and motivations. *Transport Policy,* 51**,** 165-173.
SHERF, E. N. & VENKATARAMANI, V. 2015. Friend or foe? The impact of relational ties with comparison others on outcome fairness and satisfaction judgments. *Organizational Behavior and Human Decision Processes,* 128**,** 1-14.
SHIAU, W.-L. & LUO, M. M. 2012. Factors affecting online group buying intention and satisfaction: A social exchange theory perspective. *Computers in Human Behavior,* 28**,** 2431-2444.
SHORE, T., SY, T. & STRAUSS, J. 2006. Leader responsiveness, equity sensitivity, and employee attitudes and behavior. *Journal of Business and psychology,* 21**,** 227-241.
SINCLAIR, M. 2016. Fair and Efficient Regulation of the Sharing Economy. *Economic Affairs,* 36**,** 204-211.
SKÅGEBY, J. 2010. Gift-giving as a conceptual framework: framing social behavior in online networks. *Journal of Information Technology,* 25**,** 170-177.
SMITH, R. W. & BUGNI, V. 2006. Symbolic interaction theory and architecture. *Symbolic interaction,* 29**,** 123-155.
SNELGAR, R. S. 2006. Egoistic, altruistic, and biospheric environmental concerns: Measurement and structure. *Journal of environmental psychology,* 26**,** 87-99.
SO, K. K. F., OH, H. & MIN, S. 2018. Motivations and constraints of Airbnb consumers: Findings from a mixed-methods approach. *Tourism Management,* 67**,** 224-236.
SOBLE, A. 1978. Deception in social science research: Is informed consent possible? *Hastings Center Report***,** 40-46.
SOLOMON, M. R. 1983. The role of products as social stimuli: A symbolic interactionism perspective. *Journal of Consumer research,* 10**,** 319-329.
SPARKS, E. A., EHRLINGER, J. & EIBACH, R. P. 2012. Failing to commit: Maximizers avoid commitment in a way that contributes to reduced satisfaction. *Personality and Individual Differences,* 52**,** 72-77.
SPENCER, S. & RUPP, D. E. 2009. Angry, guilty, and conflicted: Injustice toward coworkers heightens emotional labor through cognitive and emotional mechanisms. *Journal of Applied Psychology,* 94**,** 429.
SPRAGUE, R. 2015. Worker (Mis)Classification in the Sharing Economy: Trying to Fit Square Pegs into Round Holes. *ABA Journal of Labor & Employment Law,* 31**,** 53-76.
STAFFORD, L. 2008. Social exchange theories. *Engaging theories in interpersonal communication: Multiple perspectives***,** 377-389.
STARR JR, R. G., ZHU, A. Q., FRETHEY-BENTHAM, C. & BRODIE, R. J. 2020. Peer-to-peer interactions in the sharing economy: Exploring the role of reciprocity within a Chinese social network. *Australasian Marketing Journal (AMJ)*.
STATISTA. 2019. *Share of people who have used or provided sharing economy services worldwide in 2018, by country* [Online]. Lloyd's of London. Available: https://www-statista-

com.libproxy.ncl.ac.uk/statistics/881227/use-of-sharing-economy-services-by-country/ [Accessed].
STERN, P. C. 2000. New environmental theories: toward a coherent theory of environmentally significant behavior. *Journal of social issues,* 56**,** 407-424.
STHAPIT, E. & JIMÉNEZ-BARRETO, J. 2018. Exploring tourists' memorable hospitality experiences: An Airbnb perspective. *Tourism Management Perspectives,* 28**,** 83-92.
STRAUSS, A., SCHATZMAN, L., ERLICH, D., BUCHER, R. & SABSHIN, M. 1973. The hospital and its negotiated order. Reprinted in G. Salaman and K. Thompson (Eds.), People and organizations. London: Longman.
STRUTTON, D. & LUMPKIN, J. R. 1994. Problem-and emotion-focused coping dimensions and sales presentation effectiveness. *Journal of the Academy of Marketing Science,* 22**,** 28-37.
SUH, A. & SHIN, K.-S. 2010. Exploring the effects of online social ties on knowledge sharing: A comparative analysis of collocated vs dispersed teams. *Journal of Information Science,* 36**,** 443-463.
TABACHNICK, B. G., FIDELL, L. S. & ULLMAN, J. B. 2007. *Using multivariate statistics*, Pearson Boston, MA.
TAJFEL, H. 1974. Social identity and intergroup behaviour. *Information (International Social Science Council),* 13**,** 65-93.
TAN, P.-N. 2006. *Introduction to data mining*, Pearson Education India.
TANIS, M. & POSTMES, T. 2005. A social identity approach to trust: Interpersonal perception, group membership and trusting behaviour. *European Journal of Social Psychology,* 35**,** 413-424.
TAVARES, S. M., VAN KNIPPENBERG, D. & VAN DICK, R. 2016. Organizational identification and "currencies of exchange": Integrating social identity and social exchange perspectives. *Journal of Applied Social Psychology,* 46**,** 34-45.
TAYLOR, S. & TODD, P. A. 1995. Understanding information technology usage: A test of competing models. *Information systems research,* 6**,** 144-176.
TER HUURNE, M., RONTELTAP, A., GUO, C., CORTEN, R. & BUSKENS, V. 2018. Reputation effects in socially driven sharing economy transactions. *Sustainability,* 10**,** 2674.
THAM, A. 2016. When Harry met Sally: different approaches towards Uber and AirBnB—an Australian and Singapore perspective. *Information Technology & Tourism,* 16**,** 393-412.
THIELMANN, I. & HILBIG, B. E. 2015. The traits one can trust: Dissecting reciprocity and kindness as determinants of trustworthy behavior. *Personality and Social Psychology Bulletin,* 41**,** 1523-1536.
THOMPSON, C. G., KIM, R. S., ALOE, A. M. & BECKER, B. J. 2017. Extracting the variance inflation factor and other multicollinearity diagnostics from typical regression results. *Basic and Applied Social Psychology,* 39**,** 81-90.
THRIVE ANALYTICS. 2019. *The State of Sharing Economy Users* [Online]. Thrive Analytics. Available: https://get.thriveanalytics.com/sharing-economy-report/ [Accessed].
TRANFIELD, D., DENYER, D. & SMART, P. 2003. Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review. *British Journal of Management,* 14**,** 207-222.
TROCHIM, W. & DONNELLY, J. 2008. The research methods knowledge base 3rd ed. th ed. *Cincinnati (OH): Atomic Dog Publishing*.
TSAI, M.-T. & CHENG, N.-C. 2012. Understanding knowledge sharing between IT professionals–an integration of social cognitive and social exchange theory. *Behaviour & Information Technology,* 31**,** 1069-1080.
TSAI, W. & GHOSHAL, S. 1998. SOCIAL CAPITAL AND VALUE CREATION: THE ROLE OF INTRAFIRM NETWORKS. *Academy of Management Journal,* 41**,** 464-476.
TSAI, Y.-H., MA, H.-C., LIN, C.-P., CHIU, C.-K. & CHEN, S.-C. 2014. Group social capital in virtual teaming contexts: A moderating role of positive affective tone in knowledge sharing. *Technological Forecasting and Social Change,* 86**,** 13-20.

TURNER, J. C. 1975. Social comparison and social identity: Some prospects for intergroup behaviour. *European journal of social psychology,* 5**,** 1-34.
TUSSYADIAH, I. & PESONEN, J. 2016. Drivers and barriers of peer-to-peer accommodation stay – an exploratory study with American and Finnish travellers. *Current Issues in Tourism***,** 1-18.
TUSSYADIAH, I. P. 2015. An exploratory study on drivers and deterrents of collaborative consumption in travel. *Information and communication technologies in tourism 2015.* Springer.
TUSSYADIAH, I. P. 2016. Factors of satisfaction and intention to use peer-to-peer accommodation. *International Journal of Hospitality Management,* 55**,** 70-80.
TUSSYADIAH, I. P. & PESONEN, J. 2015. Impacts of Peer-to-Peer Accommodation Use on Travel Patterns. *Journal of Travel Research,* 55**,** 1022-1040.
UPRICHARD, E. 2013. Sampling: Bridging probability and non-probability designs. *International Journal of Social Research Methodology,* 16**,** 1-11.
VAN DIJKE, M., GOBENA, L. & VERBOON, P. 2019. Make me want to pay. A three-way interaction between procedural justice, distributive justice, and power on voluntary tax compliance. *Frontiers in psychology,* 10**,** 1632.
VAN NUENEN, T. 2016. The production of locality on peer-to-peer platforms. *Cogent Social Sciences,* 2.
VAREY, R. J. 2015. Social exchange (theory). *Wiley encyclopedia of management***,** 1-3.
VEHOVAR, V., TOEPOEL, V. & STEINMETZ, S. 2016. Non-probability sampling. *The Sage handbook of survey methods***,** 329-345.
VELEZ, J. A. 2015. Extending the theory of Bounded Generalized Reciprocity: An explanation of the social benefits of cooperative video game play. *Computers in Human Behavior,* 48**,** 481-491.
VENKATESH, V., MORRIS, M. G., DAVIS, G. B. & DAVIS, F. D. 2003. User acceptance of information technology: Toward a unified view. *MIS quarterly,* 27**,** 425-478.
VENKATESH, V., THONG, J. Y. & XU, X. 2012. Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. 36**,** 157-178.
VILLENA, V. H., REVILLA, E. & CHOI, T. Y. 2011. The dark side of buyer–supplier relationships: A social capital perspective. *Journal of Operations management,* 29**,** 561-576.
VOYTENKO PALGAN, Y., ZVOLSKA, L. & MONT, O. 2017. Sustainability framings of accommodation sharing. *Environmental Innovation and Societal Transitions,* 23**,** 70-83.
WAITE, L. & LEWIS, H. 2017. Precarious Irregular Migrants and Their Sharing Economies: A Spectrum of Transactional Laboring Experiences. *Annals of the American Association of Geographers***,** 1-15.
WALLENSTEIN, J. & SHELAT, U. 2017a. Hopping Aboard the Sharing Economy. *Boston Consulting Group*.
WALLENSTEIN, J. & SHELAT, U. 2017b. What's Next for the Sharing Economy? *Boston Consulting Group*.
WALSTER, E., BERSCHEID, E. & WALSTER, G. W. 1973. New directions in equity research. *Journal of personality and social psychology,* 25**,** 151.
WALTER, M. 2006. The nature of social science research. *Social research methods: An Australian perspective***,** 1-28.
WANG, D. & NICOLAU, J. L. 2017. Price determinants of sharing economy based accommodation rental: A study of listings from 33 cities on Airbnb.com. *International Journal of Hospitality Management,* 62**,** 120-131.
WANG, X. & LIU, Z. 2019. Online engagement in social media: A cross-cultural comparison. *Computers in Human Behavior,* 97**,** 137-150.
WANG, X., TAJVIDI, M., LIN, X. & HAJLI, N. 2020. Towards an ethical and trustworthy social commerce community for brand value co-creation: A trust-commitment perspective. *Journal of Business Ethics***,** 137-152.

WANG, Y., XIANG, D., YANG, Z. & MA, S. S. 2019. Unraveling customer sustainable consumption behaviors in sharing economy: A socio-economic approach based on social exchange theory. *Journal of Cleaner Production,* 208**,** 869-879.
WARKENTIN, M. & SIPONEN, M. 2015. An enhanced fear appeal rhetorical framework: Leveraging threats to the human asset through sanctioning rhetoric. *MIS quarterly,* 39**,** 113-134.
WASKO, M. M. & FARAJ, S. 2005. Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS quarterly***,** 35-57.
WATANABE, C., NAVEED, K., NEITTAANMÄKI, P. & FOX, B. 2017. Consolidated challenge to social demand for resilient platforms - Lessons from Uber's global expansion. *Technology in Society,* 48**,** 33-53.
WATKINS, P., SCHEER, J., OVNICEK, M. & KOLTS, R. 2006. The debt of gratitude: Dissociating gratitude and indebtedness. *Cognition & Emotion,* 20**,** 217-241.
WEBER, C. & WEBER, B. 2011. Exploring the antecedents of social liabilities in CVC triads—A dynamic social network perspective. *Journal of Business Venturing,* 26**,** 255-272.
WEBER, T. A. 2014. Intermediation in a Sharing Economy: Insurance, Moral Hazard, and Rent Extraction. *Journal of Management Information Systems,* 31**,** 35-71.
WESTERLAKEN, K. M., JORDAN, P. J. & RAMSAY, S. 2017. What about 'MEE': A Measure of Employee Entitlement and the impact on reciprocity in the workplace. *Journal of Management & Organization,* 23**,** 392-404.
WHITHAM, M. M. & CLARKE, H. 2016. Getting is Giving: Time Banking as Formalized Generalized Exchange. *Sociology Compass,* 10**,** 87-97.
WILLS, T. A. 1981. Downward comparison principles in social psychology. *Psychological bulletin,* 90**,** 245.
WITTE, K. 1992. Putting the fear back into fear appeals: The extended parallel process model. *Communications Monographs,* 59**,** 329-349.
WU, X. & SHEN, J. 2018. A study on airbnb's trust mechanism and the effects of cultural values—Based on a survey of Chinese consumers. *Sustainability,* 10**,** 3041.
WYATT, A. 2014. My House Is Your House. *Planning,* 80**,** 41-43.
YANG, S., SONG, Y., CHEN, S. & XIA, X. 2017. Why are customers loyal in sharing-economy services? A relational benefits perspective. *Journal of Services Marketing,* 31.
YEON-SUN, H. & CHANG-HEE, K. 2016. A Study on the Sharing Economy Apartments and It's Ubiquitous Monitoring System. *International Journal of Smart Home,* 10**,** 249-258.
ZAPATA-PHELAN, C. P., COLQUITT, J. A., SCOTT, B. A. & LIVINGSTON, B. 2009. Procedural justice, interactional justice, and task performance: The mediating role of intrinsic motivation. *Organizational behavior and human decision processes,* 108**,** 93-105.
ZDANIUK, A. & BOBOCEL, D. R. 2012. Vertical individualism and injustice: The self-restorative function of revenge. *European Journal of Social Psychology,* 42**,** 640-651.
ZELIZER, V. 2004. Circuits of commerce. *Self, social structure, and beliefs: Explorations in sociology***,** 122-144.
ZHOU, R., WANG, X., ZHANG, L. & GUO, H. 2017. Who tends to answer open-ended questions in an e-service survey? The contribution of closed-ended answers. *Behaviour & Information Technology,* 36**,** 1274-1284.
ZHOU, T. 2013. Examining continuous usage of location-based services from the perspective of perceived justice. *Information Systems Frontiers,* 15**,** 141-150.
ZLOTEANU, M., HARVEY, N., TUCKETT, D. & LIVAN, G. 2018. Digital Identity: The effect of trust and reputation information on user judgement in the Sharing Economy. *PloS one,* 13**,** e0209071.