Sharing Economy: Studying the Social and Psychological Factors and the Outcomes of Social Exchange

Abstract:

Against the backdrop of the growing reliance of consumers on the sharing economy, the literature still has little evidence on the psychological and social factors of use behaviour and outcomes. Given the gaps in the research, this study adopted an overarching approach to comprehensively investigate the role of the factors facilitating social exchange, reciprocity expectation and social value in use behaviour. The effects of the sharing economy on social inclusion and subjective well-being were also tested. The data were collected from 487 users of different sharing economy platforms in the United States. Structural equation modelling was employed to analyse the correlation of the examined variables. 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. Also, the study found strong relationships between use behaviour and outcomes, moderated by age, use frequency and use intensity. The theoretical and practical implications of the findings are provided.

Keywords: sharing economy, social exchange, social capital, factors of use behaviour, subjective well-being, social inclusion

Highlights:

- The paper explored the social and psychological factors in, and outcomes of, use behaviour
- Social value had a positive effect on use behaviour
- Social ties, shared vision, altruistic belief and biospheric belief were found to be insignificant in predicting use behaviour
- Egoistic belief and reciprocity norm had significant positive effects, while identification had a significant negative effect on use behaviour
- Use behaviour positively related to social inclusion and subjective well-being
- The relationships between use behaviour and outcomes were affected by age, use frequency and use intensity.

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1. Introduction

The emergence of a crowd-based socio-economic system, known as a sharing economy, enables the use of resources without their possession either for free or for compensation through the practices of collaborative consumption, sharing, gift-giving and commodity exchange [1, 2]. A new model of resource redistribution ensures a reduction of consumption and a decreased cost of access to resources, leading to economic, social and environmental benefits [3]. The impacts of the sharing economy fuel the interest of users and contribute to the growth of platforms, such as Uber, WeWork (shared workspace provider), Couchsurfing and Airbnb [4, 5]. The increase in transactions in the sharing economy reflects the changes in consumer purchasing values and behaviour [6-9]. Still, despite the growing interest in the sharing economy, there are very few empirical studies that have explored the underpinnings of user behaviour [10, 11]. 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 [3]. Given the potential of the sharing economy to deliver societal benefits [3], it is imperative to ensure the sustainability of a collaborative mode of resource distribution. By exploring consumer behaviour 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.

Given the above, this research aims to address three key gaps. The first gap refers to the nature of users' collaborations, which has led towards two divergent paths – the social and the economic one. These two streams discuss different underlying motives for using the sharing economy [12]. For example, the economic perspective examines monetary-based transactions, like selling and purchasing second-hand items through online marketplaces and product-service systems (PSS). These transactions are believed to maximise profit, optimise investments and increase savings enabled by the reduction in costs [13-17]. Therefore, price and utilitarian factors are dominant in the research [18, 19]. In contrast, the social stream examines free collaborations [10, 20-22], which are believed to be based on non-obligatory compensation (i.e. generalised reciprocity) underpinned by altruistic motives [23]. However, non-compensated practices may imply postponed reciprocation, motivating consumers to embark on transactions [22, 24]. Owing to the social - economic dichotomy in the literature, the relationships of psychological factors, like expected reciprocation, and social factors with use behaviour are left unexplained, although they play key roles in all socio-economic relations [25, 26] .

Second, 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 [29, 32, 33], cultural value [34], price [18], reputation [35] and privacy [36]. 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 [27-30] or ridesharing providers, such as Uber [31].

Third, the user perspective on the outcomes of using sharing economy platforms is under-researched. The focus of the current literature is pitched at a macro level. Particularly, the literature discusses the effect on environmental sustainability and institutional change [13, 15, 37-41]. However, it is lacking evidence related to perceived benefits, e.g. around interactions with other members/communities and also well-being.

In view of the above gaps, this paper aims to examine social antecedents and outcomes of the sharing economy from the users' perspective. The first objective of this paper is to investigate the psychological underpinnings of compensated and non-compensated collaborations in the sharing economy. We adopt the social exchange theory perspective, which serves as a framework guiding the selection of the main groups of social and psychological factors driving users' participation in socially exchanged relations. Secondly, this study uses the comprehensive framework of social capital factors representing structural, cognitive and relational facilitators of social exchange, rather than focusing on a narrow set of variables. Such an approach makes it possible to uncover norms and expectations, which motivate people to embark on transactions through platforms. To widen the implications of the study, 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 third objective of the paper is to gather first-hand data about the impact of sharing economy platforms on the user's life. Hence, the study aims to test the effect of use behaviour on perceived social inclusion and subjective well-being.

In seeking to fulfil the above objectives, this research makes three main contributions. The use of the social exchange theory makes it possible to examine the role of the factors facilitating/inhibiting social exchange, expected reciprocity and social values. The study finds that the effects of expected reciprocity and social values on use behaviour are significant. The results confirm that by participating in sharing economy transactions people expect compensation and the satisfaction of personal needs in social interactions and the creation of a social image, adding to the debates about the altruistic foundation of the sharing economy [20, 48-53]. These findings provide a comprehensive and novel insight into social and psychological variables affecting the users' motivations and shed light on discrepant findings on motives driving socio-economic relations (e.g. [10, 18, 19, 23, 45, 54]). Second, 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. Results demonstrate that people are motivated by egoistic beliefs while having no concerns about the environment, common goals shared by other members and social ties. These results enrich the literature by providing evidence that positive environmental implications of the sharing economy [55, 56] are unintended outcomes of platform use. The results provide a perspective that the sharing economy is rather a commercially-oriented system. This perspective contradicts the literature discussing the strength of community-oriented motives that support the concept of sharing economic relations [22, 57]. In addition, 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. Third, this study 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 of the study helps explore the degree to which the declared social benefits of collaborations in the sharing economy reflect the collective-oriented goals of collaborations.

2. Theoretical Background

Social Exchange Theory

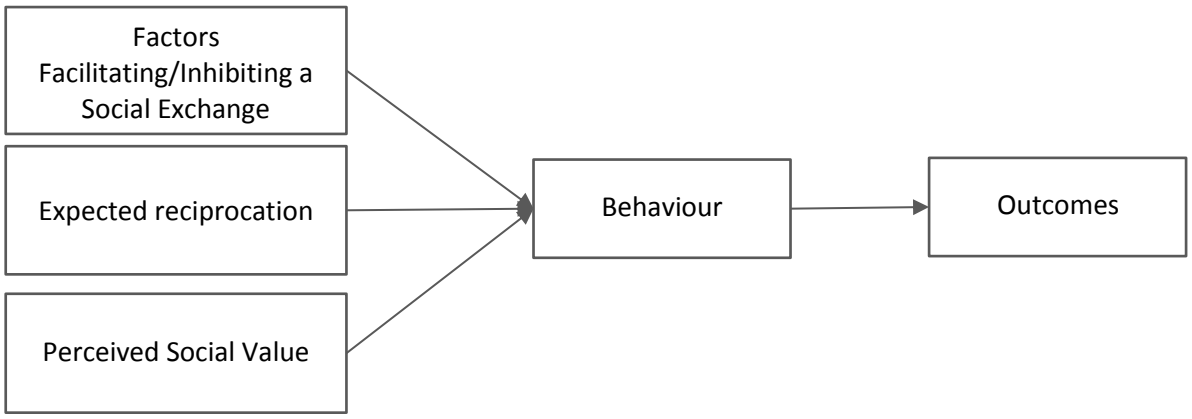
The study uses social exchange theory as its theoretical starting point as this theory can inform the investigation of the antecedents of exchange between actors and the social structures resulting from it. Social exchange is defined as *"the exchange of activity, tangible or intangible, and more or less rewarding or costly, between at least two persons or more"* [58]. 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 [58-60]. The rationale for using social exchange theory in this study is that it reflects the main characteristics of the sharing economy. First, the theory represents social behaviour as an act of exchange of material and non-material resources with the purpose of maximising rewards against the costs borne to fulfil exchange [58, 61]. In the same way, the sharing economy relations are based on an interpersonal exchange of tangible and intangible resources [1]. Secondly, social exchange theory denotes the flexibility of the type and amount of rewards (i.e. quantifiable and non-quantifiable) [62, 63], similar to sharing economy relations, where reciprocity can be monetary, nonmonetary, negotiated (immediate and mutual reciprocation) or generalised (without the obligation or the expectation of immediate return) [23, 64]. The theory has been applied to examine consumption behaviour in the sharing economy and ridesharing [31, 65] and has been an influential tool in explaining relationship models functioning on the basis of information [63] and online systems [66-68].

There are three main propositions of social exchange theory that inform the selection of factors for examination in this study. 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 [42, 44-46]. 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 [46]. The second proposition postulates that people engage in exchange with the purpose of producing reciprocal relationships [60, 69]. 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 of the exchange. 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 [60]. The third proposition argues that a cost-benefit analysis is a subjective process [58, 60], drawing on personal values [70]. Similarly, in the sharing economy, actors evaluate the participation in exchange by weighing the likelihood of satisfying expected values.

Given the above, social exchange is 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 study 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 (Figure 1).

Figure 1: Overview of the model



3. Hypothesis Development

3.1 Social Capital Factors

This study adopted the framework of Nahapiet and Ghoshal [42] 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 [44]. *Cognitive social capital* refers to resources that enable community members to have a common interpretation and understanding of events and things [42, 45]. *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 [42, 44, 46, 47]. However, Nahapiet and Ghoshal [42] focused on the examination of social capital in an organisational context. Later Wasko and Faraj [45] 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 [43] reduced the cognitive dimension to only one construct, and conceptualised it as a shared vision. This facilitates the achievement of collective goals and embraces the essence of collective actions [43]. Drawing on the aforementioned literature and taking into consideration the context of this study, we used adapted structural and cognitive social capital constructs for the development of the hypotheses.

Structural Social Capital Factor: Structural social capital can intensify the collaboration of people within communities. It happens when members develop strong and direct relationships (bonding ties) as a result of repeated interactions with each other [46]. The likelihood of collective actions within communities increases with a high frequency of previous collaborations [71]. The literature provides evidence of the direct and mediated effect of social ties on exchange practices [43, 45, 54]. Connections within the community indirectly affect collaborative behaviour through the development of trust towards members [43]. The relationship between the density of social networks and the intention to engage in sharing is also mediated by attitude

[72]. The direct effect of structural social capital in the context of online communities was tested in several studies [45, 54]. For example, bonding ties have been shown to be significant predictors of the use of social networking websites [45, 54]. The availability of strong connections between members ensures the regular contact of individuals with each other, the development of habitual cooperation and a high contribution to the networks [45, 71]. According to the social capital theorists, access, time and referrals are the three main properties of structural social capital that benefit members of the sharing economy and facilitate collective actions [73, 74]. Social ties give access to valuable information about the resources being distributed through platforms and how they can be useful for users. Through social ties, users of sharing economy platforms receive the information about the resources in a timely manner, increasing the likelihood of a successful cooperation. Finally, referrals provide opportunities by suggesting personal contacts that might be useful in future collaborations. In line with the above, 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 and eliminate the possibility of opportunistic behaviour [43]. The facilitating role of cognitive social capital has been examined in relation to collective practices [10, 43, 45]. There are several ways in which shared vision can affect behaviour. It has a strong influence on behaviour when it is mediated by perceived trust in the members of a community [43, 72]. The path to behavioural intention is indirect, through subjective norms and attitude to sharing [72]. In general, the findings are contradictory, with the influence of cognitive social capital varying depending on the context of the study [45]. There was an assumption that members with a shared vision have stronger attachments and a higher likelihood of knowledge exchange. However, the effect was significantly negative [75]. In the context of sharing platforms, the direct effect of shared vision on behaviour has not been tested. Given the confirmed effect of this factor on behavioural intention to share accommodation online [10] and evidence from the literature of the role of cognitive social capital in collaborative behaviour online, we hypothesise 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 [42]. *Identification* is defined as *"one's conception of self in terms of the defining features of self-inclusive social category*" [76]. 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 [42]. Consequently, the identification that is inconsistent with other group members may hinder knowledge sharing practices [75]. The sense of identity with group members positively affects the collaborations in social groups because it enhances the value of relations and concerns over the outcomes of those relations [42]. There is evidence that identification has an indirect effect on the behaviour of people [11, 51]. Identification with the community underlies perceived usefulness and perceived encouragement to use social networking sites that are positively correlated with actual use [51]. When it comes to collaborative consumption, salient identification with a group can increase the frequency of actual collaborations [47]. Evidence suggests that the sense of belonging to the accommodation renting community positively affects perceived enjoyment, leading to higher intention to rent [11]. 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 [77]. 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 [20, 48, 49]. For example, sustainability was one of the key influencing factors of intention to collaborate on accommodation and online marketplace platforms [78]. In the context of collaborative for-profit cooperation, the sustainability motive influenced behavioural intention through enhancing a positive attitude to the community [79]. In addition, perceived sustainability benefit had an indirect effect on collaborative consumption through perceived usefulness [11]. Similarly, altruistic value had an effect on actual use through perceived ease of use and the social support of other group members [51]. 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) [52]. In accordance with the value-belief-norm theory of Stern [52] and extant evidence from the literature, we posit that:

H4a: Altruistic belief has a positive effect on the use of sharing economy platforms.

H4b: Biospheric belief has a positive effect on the use of sharing economy platforms.

H4c: Egoistic belief has 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 [60]. 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 [23, 64]. 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 [10]. The expectation of reciprocity was one of the motivators to share knowledge in virtual communities [75]. Also, there has been a great deal of speculation about the degree to which gift-giving obliges parties of relations to pay back for a gift [20, 21]. The conceptual underpinning postulates that gift-giving is free from reciprocation [23]. However, in practice, the distribution of gifts is stimulated by the belief that a giver will receive an equivalent reward in return [21]. When it comes to market-place settings, the perception of mutual benefits has been shown to be a significant prerequisite of developing a positive attitude toward engaging in collaborative purchasing [80]. Based on the above-mentioned discussion, the following hypothesis states that:

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

3.2 Perceived Social Values

This study adopts the conceptualisation of perceived value as a preferred outcome of behaviour, proposed by Holbrook and Corfman [81]. 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 the 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 [82, 83]. For example, sharing economy users develop relations with peers through repeated social interactions, especially when sharing accommodation [78, 84, 85]. Travellers receive the opportunity to feel closer to local communities by interacting with hosts and ensure continuous collaborations with members of the community by developing interpersonal trust [86, 87]. Social interaction was found to be stronger in driving users' intention to repurchase services in the sharing economy compared to functional or emotional ones [88]. On the other hand, behaviour may represent a means to establish one's own social identity [82, 83, 89]. For example, the sharing economy realises the idea of people having equal access to commodities while reducing overproduction, natural resources and ecological pollution [20, 49]. People with a high perception of social value see a higher utility of sharing economy platforms for the welfare of the community and are more likely to develop trusting relations with community members [11, 87]. 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.

3.3 The Outcomes of Using Sharing Platforms

Positive outcomes of sharing reflect the degree to which individual goals are met [13, 78, 90, 91] 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 [92]. Atkinson [93] summarised four attributes of social exclusion, which are: multiple deprivations, agency, relativity and dynamics. Multiple deprivations refer to the state when a person lacks financial resources, employment and social relations with the community. Agency relates to the state of being voluntarily or involuntarily isolated from the society. Relativity refers to the state when exclusion is experienced relative to a particular time and space. Dynamics implies the prospective effect of the state of exclusion on the future [93]. 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 a job, financial resources), the social (benefit from public social services) and the interpersonal (having family, friends and social network) levels [92]. *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 [94]. Social inclusion and well-being may be achieved through the development of a social network, the sense of belonging with other members of a community, the reinforcement of self-confidence, exploitation of resources that otherwise would not be affordable, the realisation of environmental goals and other meaningful activity [49, 57, 95, 96]. 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 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 [53, 97]. Reciprocity, trust, care, equity, integrity and the inclusion of each member of the community foster collective well-being, while the efficient collaborative production promotes environmental sustainability [98-100]. 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 [101]. 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 [102]. 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 [103, 104]. Given evidence in the literature, the next hypothesis states that:

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

A summary of supportive evidence about the relationships between the variables is presented in Table 1.

Table 1: Relationships between social exchange antecedents, behaviour and outcomes

Construct	Path	Positive Relationship	Negative Relationship
Social Ties (ST)	ST--> TR --> B	[43]	
	ST--> ATT --> B	[72]	
	ST --> B	[45, 54]	
	ST --> B		[10]
Shared Vision (SVS)	SVS -->TR --> B	[43]	
	SVS --> TR --> BI	[72]	
	SVS --> ATT --> BI	[72]	
	SVS --> B	[45]	
	SVS --> B		[75]
Identification (ID)	ID --> PU/PENC --> B	[51]	
	ID --> PEN --> B	[11]	
	ID --> SAT/CIU	[77]	
Pro-Environmental Beliefs (ProE)	AV --> PEOU --> B	[51]	
	ProE --> B	[52]	
	ProE --> B		[77]
Reciprocity Norm (REC)	REC --> BA	[80]	
	REC --> B	[75]	
Social Value (SV)	SV --> SAT	[78]	
	SV --> PU --> BI	[11]	
	SV --> CIU		[78]
Subjective Well-being (SWB) and Social Inclusion (SI)	CO --> SWB	[53]	

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)

3.4 Moderators

In this study we propose that age, income, use frequency and use intensity have moderating effects on the relationship between use behaviour and outcomes. Published research has shown that perceived values of the use of the sharing economy differ depending on the socio-economic background of the respondents and the frequency of use [91, 105, 106]. 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 [107-110]. The majority of the literature provides evidence that the respondents of a higher economic status experience a higher degree of life satisfaction [107, 109, 111]. The findings are in line with the economic conceptualisation of societal welfare, equating the quality of life to the economic status of the population [109]. 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 [110, 112]. 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 [111]. 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 [108, 110]. However, the prior research found that younger users were reported to have a higher quality of life compared to older ones [111]. 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 [90]. Given the context of the study, 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, we hypothesise 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 the perceived happiness and overall life satisfaction [113]. 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 [114]. In a similar vein, the internet-enabled sharing economy offers economic, hedonic and social benefits to its users [79]. 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.

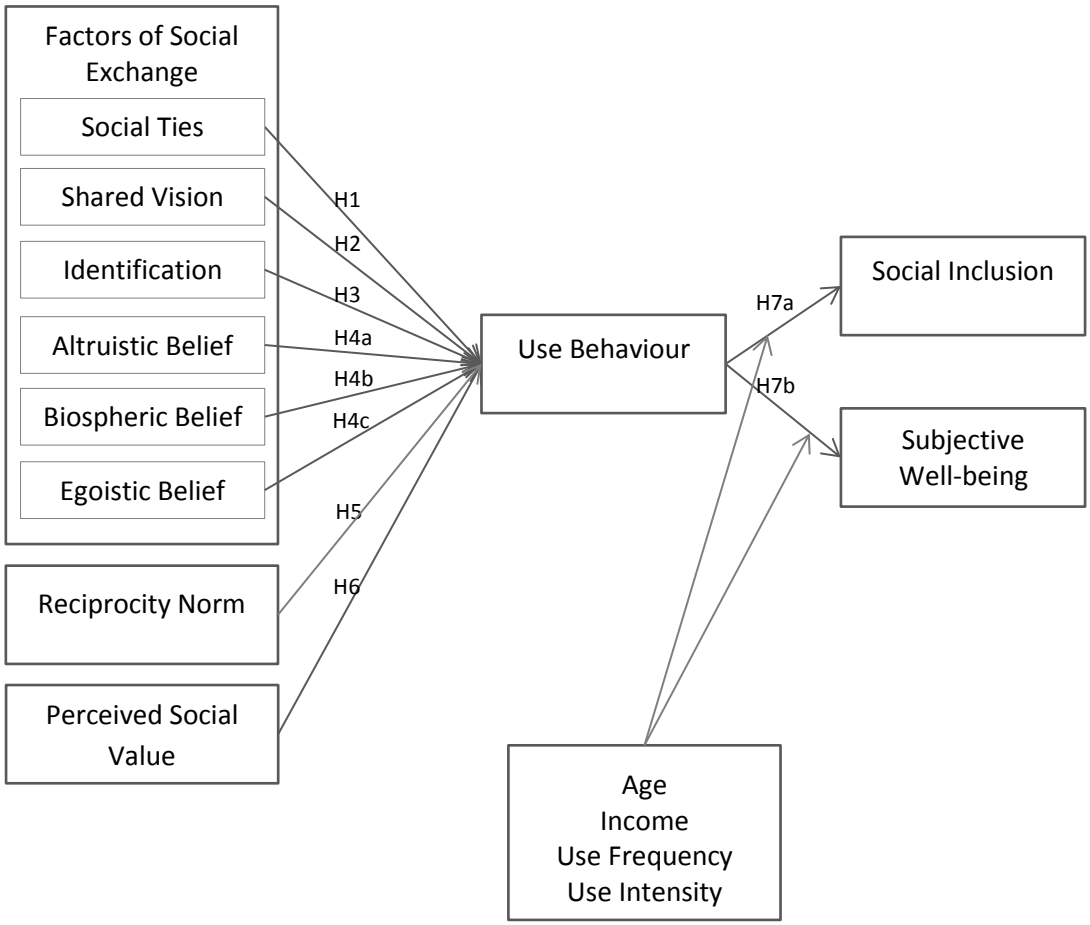
H9b: Use intensity moderates the effect of use behaviour on social inclusion and subjective well-being in such a way that people using sharing economy platforms more intensively are more likely to feel socially included and experience well-being.

Table 2 summarises evidence from the literature confirming the proposed moderation effects. Figure 2 presents all the hypothesised relationships between the social exchange antecedents, use behaviour and outcomes, as well as the moderation effect of socio-demographic factors and use patterns.

Table 2: Moderation effects of socio-demographic factors and use patterns

Moderator	Path	Positive effect	Negative effect
Age	B -- > SI	[110]	
	B -- > SWB	[108]	[111]
Income	B -- > SI	[110, 112]	
	B -- > SWB	[107, 109, 115]	[116]
Use Frequency	B -- > SI		
	B -- > SWB	[113]	
Use Intensity	B -- > SI	[114]	
	B -- > SWB	[114]	

Figure 2: Hypothetical model



4. Methodology

4.1 Data Collection and Sampling

The study examines the predictive power of a set of variables on the use of online sharing economy platforms. Therefore, using an online questionnaire was considered to be appropriate for data collection. An independent company was involved, which collected data in the United States. The respondents had to access the survey page through a URL and complete a questionnaire following guidelines on the first page of the survey. The second page of the survey comprised screening questions. Given the focus of the study, the purpose of those questions was to exclude non-users of sharing economy platforms. Survey links were distributed to 2197 people. The final sample of respondents, who passed the screening questions and submitted full responses, comprised 487 people. The respondents were 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. This number of participants enabled statistical inference from the correlation of the variables [117]. The survey was designed in such a way as to preserve respondents' anonymity and keep their demographic profile, presented in Table 3.

Table 3: Demographic profile of respondents

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

4.2 Measurements

The survey questionnaire employed 57 items to measure the relationships between eleven main constructs (Table 4). Structural social capital was represented by bonding social ties. The items for this construct were adapted from the study by Chiu, Hsu [75]. The items for the cognitive social capital, represented by the shared vision, originated from the studies by Tsai and Ghoshal [43] and Leana and Pil [118]. The items for the relational social capital were associated with three constructs, which are identification [75], the reciprocity norm [45, 119, 120] and pro-environmental beliefs [121]. Pro-environmental beliefs is a three-dimensional construct reflecting altruistic, biospheric and egoistic beliefs [121]. To assess the social value, the scale by Rintamäki, Kanto [122] was used. The use behaviour measure was adapted from the previous literature examining the behaviour of users in the context of IS systems [123-126]. When it comes to the outcomes of the behaviour, this study adapted the social inclusion scale from Richardson and Le Grand [127], while the subjective well-being measure was adapted from Diener *et al.* [128]. All items were measured 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 4: Measurement items of constructs

Measurement Item	Loading	C.R.	AVE
Bonding Social Ties [75]			
Apart from transactions, I have frequent communication with some users	0.943	0.969	0.887
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 [43, 118]			
All users are in total agreement with the vision of the platforms	0.86	0.960	0.800
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 [75]			
I am proud to be a member of communities	0.916	0.961	0.832
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 [121]			
Environmental protection benefits everyone	0.917	0.906	0.709
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 [121]			
Over the next several decades, thousands of species of plants and animals will become extinct	0.848	0.836	0.718

Modern development threatens wildlife	0.847		
Egoistic Belief [121]			
Laws to protect the environment limit my choices and personal freedom	0.795	0.867	0.766
Protecting the environment will threaten jobs for people like me	0.949		
Reciprocity [45, 119, 120]	0.86		
I believe that the benefits I give to other users will be reciprocated	0.907	0.946	0.813
It is fair to help other users when they want help with a 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 [122]			
I find products/services that are consistent with my style	0.866	0.946	0.747
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 [123-126]			
I would have no difficulty telling others about the results of using platforms	0.705	0.867	0.766
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 [127]			
I have enough money for food	0.786	0.947	0.600
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 [128]			
The engagement with sharing economy platforms makes it possible to...			
- Lead a purposeful and meaningful life	0.855	0.965	0.777
- 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		

CFA: Model fit: $\chi 2(1484) = 3748.23$, CMIN/DF = 2.526, CFI = 0.926, RMSEA = 0.056

4.3 Data Analysis

The collected data and hypotheses were tested using SPSS v.24 and SPSS Amos v.24. Following the procedure suggested by Hair [117], the confirmatory factor analysis was conducted as a first step to ensure the reliability and validity of the constructs. Model fit indices suggested an acceptable fit for the CFA model (Table 4). Table 4 presents the coefficients of factor loading (> 0.7), construct reliability (C.R. > 0.7), average variance extracted (AVE > 0.5) and Cronbach's α (>0.7), which suggest the reliability of the constructs [117]. The convergent validity test confirms that the model had no validity issues (Table 5). The second step was to conduct the structural equation modelling using Amos v.24.

Table 5: Convergent validity test

	1	2	3	4	5	6	7	8	9	10	11
Social Inclusion	0.774										
Social Ties	0.035	0.942									
Reciprocity	0.285	0.666	0.902								
Identification	0.161	0.793	0.851	0.912							
Shared Vision	0.120	0.796	0.796	0.870	0.895						
Altruistic Belief	0.318	0.342	0.487	0.433	0.404	0.842					
Biospheric Belief	0.277	0.273	0.434	0.344	0.336	0.808	0.848				
Social Value	0.277	0.658	0.748	0.826	0.765	0.462	0.434	0.864			
Egoistic Belief	0.157	-0.425	-0.297	-0.404	-0.432	0.058	0.005	-0.349	0.875		
Use Behaviour	0.536	0.402	0.607	0.540	0.525	0.406	0.380	0.658	-0.021	0.824	
Well-Being	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. Results and Findings

5.1 Path Analysis

The model fit indices demonstrated that the structural model had a good fit to examine the significance of the proposed paths (Table 6). 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, four relationships were insignificant, disconfirming the effect of some constructs on the use behaviour (H1, H2, H4a and H4b). Particularly, the effects of Social Ties, Shared Vision, Altruistic and Biospheric Beliefs were not supported. In contrast, the effect of Egoistic Belief (H4c) was significant but positive, explaining 22% of the variance. Although the relationship between Identification and Use Behaviour (H3) was significant, it was weak and negative. The other two antecedents had stronger effects on Use Behaviour (H4 and H6). Reciprocity Norm (H5) had a significant moderate effect, explaining almost 37% 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.

Table 6: The results of the test of hypotheses

Hypotheses	***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***)

Method: ML; SEM Model fit: $\chi 2(1501) = 4011.336$, CMIN/DF = 2.672, CFI = 0.918, RMSEA = 0.059

5.2 Moderation Effects

Having examined the significance of structural model paths (H – H7b), this study embarked on an analysis of the moderating effects of socio-demographic factors (age, economic status) and use patterns of sharing economy platforms (use frequency and use intensity) (Table 7). A 2-step cluster analysis was utilised to assign the sample into two groups with lower and higher values. All hypotheses but H8b showed significant effects on the paths between use behaviour and behavioural outcomes. 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. 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.

Table 7: Moderation Analysis

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; ***)

6. Discussion

6.1 Findings Elaboration

Social Capital and Social Value: The study 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, we hypothesised the effects of eight constructs on use behaviour: social ties, identification, shared vision, reciprocity, altruistic, biospheric and egoistic beliefs and social value (H1 – H6). 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 (H1, H2, H4a-b). The study shed light on the relationship between bonding social ties and use behaviour, which have been controversial to date (e.g. [10, 45, 54]). The findings demonstrated 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 adds to the literature on social capital by suggesting a redefinition of the role of bonding social ties in the reinforcement of connections [44] in virtual collaborative spaces. While developing bonding ties sustains offline communities, online platforms have the capability to substitute for 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. There are two plausible explanations for this result. First, drawing on the finding of a previous study [75], 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 (H5a and H5b) is surprising in view of the published literature arguing that sustainability and altruistic motives are strong predictors of use [51-53]. However, the quantitative research by Möhlmann [77] 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 that the study 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 (H3, H5, H4c, H6, H7a, H7b). The 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 [10, 80]. This finding provides much-needed empirical evidence in relation to the discussion about the lack of pure altruistic motives in gift-giving and sharing practices [50]. The significant positive effect of egoistic belief contradicts the majority of previous studies [51, 52]. 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 [55, 56], 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 [11, 51]. The results suggest that it is not likely that 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. 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 [11, 84, 86, 129]. By juxtaposing the correlation results of social value and pro-environmental belief with use behaviour, the findings of this study 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 study 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.

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 the previous research gave grounds to suggest that collective-oriented practices are positively correlated with subjective well-being [53], this study 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, we also controlled for use frequency, use intensity, income and age 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 results were in conflict with the majority of previous research in terms of the relative importance of lower and higher-income clusters [107, 109, 111]. 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. [130]). The tendency of people to compare their benefits with the gains of referent others, potentially from the same group [131], 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 Theoretical contribution and practical implications

The findings of the study contribute to the literature in three ways. This study broadens the understanding of the social and psychological underpinnings of sharing economy practices. We 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 [22, 57]. Guided by the social exchange theory, this study 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.

Secondly, the study 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 of the study 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 [31, 86]. Higher external validity widens the implications of the findings and adds value to the research.

The third contribution of the paper is that it provides the first empirical evidence about the effect of the sharing economy on social inclusion and subjective well-being. Despite the growing discussion on the macro-level changes brought about by the sharing economy [13, 15, 37-41], there is still a lack of first-hand data about the impact on the user's life. The findings of the study are particularly valuable for the stream of the research focusing on the implications of online systems for the well-being of society.

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 significance of the reciprocity factor suggests that both sharing economy intermediaries (platforms) and users could use rankings in their profiles, indicating the history of reciprocation. A reciprocity ranking system could be enabled only for users collaborating with each other. 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. A high significance of social value points to the importance of services that are consistent with users' lifestyles and help them keep up a socially-favoured image. Platforms need to carefully examine target users in order to tackle their preferences.

The results of the study could interest policymakers. 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 study 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. [132, 133]). 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 offers both for consumers and for entrepreneurs. The study 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. Secondly, the government should develop regulations that would protect consumers' rights without compromising on satisfying their needs. Third, 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.

6.3 Limitations and Future Research

The findings drawn from the study 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, the 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 a price, 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 can affect intentions and behaviour [134]. 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.). Finally, given that this study 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 differ 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 started using platforms recently.

7. Conclusion

The objectives of the paper were three-fold. First, the study aimed to explore the social and psychological factors driving collaborations in the sharing economy in line with social exchange theory. The findings made it possible to conclude that the main motive was to create an image that would help perform particular roles in communities. The second motivator was the belief that platforms provide mutual benefits and whenever the exchange occurs it will be reciprocated. The third motivator was the selfish desire to satisfy one's own needs when using sharing economy platforms, irrespective of the environmental consequences that their use

might incur. Secondly, we tested the correlation of three groups of social capital (structural, relational and cognitive) factors with use behaviour. The prevalence of relational factors (i.e. reciprocity norm and egoistic belief) over structural and cognitive ones represented social exchange as a selfish and opportunistic behaviour. The goal of the interactions was to satisfy immediate needs rather than build long-term relations in line with the premises of sustainable collaborations. The third objective was to examine the effect of use behaviour on social inclusion and subjective well-being. The study found that the sharing economy helped secure sustained benefits, in terms of the integration with the society at the social, legal, economic and interpersonal levels. Collaborations led to a heightened perception of overall life satisfaction.

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