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#### RESEARCH ARTICLE

## Sharing economy platforms as mainstream: balancing pro-social and economic tensions

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Based on the Theory of Planned Behaviour, this study explains sharing economy platform usage intention. Our results based on PLS-SEM estimations with survey data (N = 655) from the carpooling context show that sharing orientation (i.e. sharing usage instead of owning/buying), grassroots engagement (i.e. non-profit organisation driven by volunteers), and platform authenticity (i.e. loyalty to the original carpooling practice) are strong determinants of people's attitudes towards the carpooling platform, while trend orientation (e.g. the 'sharing economy' paradigm) is not significant. This implies that while digitalisation can optimise older practices (e.g. hitchhiking), online platforms facilitating contemporary sharing practices need to be embedded in the original sharing ethos and values to raise usage intention – even though the sharing economy has become mainstream.

**Keywords:** carpooling; online platform; grassroots engagement; P2P exchange; sharing economy; TPB

#### 1. Introduction

The sharing economy is rooted in the ever-changing digital environment, which creates both new opportunities for value creation between market actors in a diversity of sectors and challenges for businesses facing technological adaptation. This paradigm has been defined by marketing scholars as 'a scalable socioeconomic system that employs technology-enabled platforms to provide users with temporary access to tangible and intangible resources that may be crowdsourced' (Eckhardt et al., 2019, p. 7). Online platforms have made it easier to organise consumer practices based on peer-to-peer (P2P) exchanges, which has captured marketing scholars' attention (e.g. Belk et al., 2019). Similarly to that second-hand markets existed before the Internet, another practice that which has gained popularity with the advent of the sharing economy among consumers and researchers is long-distance carpooling, often used as the archetypical case for collaborative consumption platforms (e.g. Belk, 2014; Eckhardt et al., 2019; Guillemot & Privat, 2019; Guyader, 2018; Hawlitschek et al., 2018a, 2018b; Sundararajan, 2016). In this study, carpooling is when driver and passengers share a trip by car and split the travel costs – which is different from ride-sourcing or ride-haling business models of transportation network companies (Cohen & Kietzmann, 2014; Jin et al., 2018).

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Although the sharing economy unicorns have already celebrated their 10th anniversaries, it is estimated that only 4% of the European population participate in the sharing economy on a regular basis (European Commission, 2018). There is a need for more research insights to understand what factors matter most when it comes to increasing intention to participate - which is a gap identified in recent literature (e.g. Küper & Edinger-Schons, 2020; Ni, 2021). First and foremost, there are obvious tensions between the economic and social aspects of sharing economy practices, like financial transactions between friends which can get awkward. The particularity of the sharing economy is that it resides in a continuum between two opposite behaviours: i.e. 'true sharing' and traditional commodity exchange (Belk et al., 2019; Eckhardt et al., 2019; Habibi et al., 2016). On the one hand, sharing is a pro-social behaviour, non-market mediated, and based on shared ownership, while on the other, commodity exchange is an economic behaviour, mediated by market relationships between buyers and sellers trading in rights of ownership to possessions. As such, sharing economy platforms blur the lines between the social (communal sharing norms) and economic (market exchange norms) logics of society.

For long, people had been dropping friends off at the airport, taking the dogs out while they are away, or borrowing them their car if necessary - Uber, DogVacay, and Drivy are firms that have digitalised and monetised such P2P practices, respectively. Airbnb too, 'is an old idea, being replicated and made relevant again through P2P networks and new technologies. [...] Online exchanges mimic the close ties once formed through face-to-face exchanges in villages, but on a much larger and unconfined scale' (Botsman & Rogers, 2010, p. xiv). In light of the so-called commodification (Rifkin, 2000) and the sharewashing debate (Belk, 2014; Bucher et al., 2018; Eckhardt & Bardhi, 2015; Hawlitschek et al., 2018a; Küper & Edinger-Schons, 2020; Martin et al., 2015; Scholz, 2016; Slee, 2015; Sundararajan, 2016), more research is needed on how consumers perceive these aspects of commercialisation of genuine sharing practices and grassroots movements.

This study contributes to the body of research on the sharing economy in several ways. A refined model of sharing economy beliefs and attitudes is empirically tested. It emphasises the tensions between the pro-social and economic tensions evoked earlier, considering the influence of a 'true sharing' orientation on the part of participants rather than a modern platform in line with the current sharing economy trend. This unique contribution highlighting the importance of sharing orientation, grassroots engagement, and platform authenticity was made possible as a nonprofit carpooling service with a well-developed platform was approached. Managerial guidelines are provided regarding the involvement of participants and the authenticity of online platforms – two key factors when it comes to increasing favourable attitudes to participation. Finally, lessons learned from this study are discussed such as how it can benefit commercial carpooling services and other sharing economy platforms, since participants in non-monetary sharing and alternative markets like online swapping, timebanks, toy or clothing libraries, continue to buy and consume from traditional market offerings (Albinsson & Perera, 2012; Guillemot & Privat, 2019; Lang & Joyner Armstrong, 2018; Martin et al., 2015; Martin & Upham, 2016; Ozanne & Ballantine, 2010; Papaoikonomou & Valor, 2016). Implications for policy makers and governmental authorities in sharing cities to lower participation barriers and increase platform usage include the support of grassroots initiatives in line with the prosocial logic, rather than the promotion of the commercialisation of genuine sharing practices.

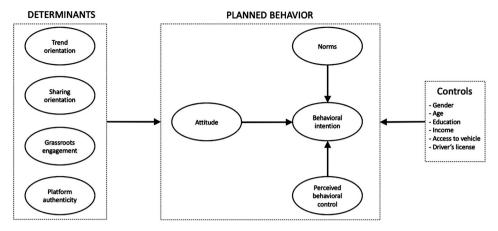


Figure 1. Theoretical framework.

#### 2. Theoretical framework and hypothesis development

The proposed model (see Figure 1) is theoretically anchored in the Theory of Planned Behaviour: It aims to explain people's behavioural intention to use a sharing economy platform in the context of long-distance carpooling, which is dependent on their attitude towards the platform, as well as norms and their perceived behavioural control, while controlling for the relevant variables.

#### 2.1. Theory of planned behaviour

Ajzen's (1991) Theory of Planned Behaviour (TPB) is often used in social sciences to explain the behaviour of an individual based on his/her intention to engage in this particular behaviour, something which is in turn influenced by his/her attitudes and norms. The TPB additionally includes perceived behavioural control as an antecedent of behavioural intentions, as well as (subjective and moral) norms (Ajzen, 1991, 2019; Olsson et al., 2018; Roos & Hahn, 2017). That is to say, a favourable attitude towards a behaviour constitutes the motivation necessary (i.e. the behavioural intention) to actually perform the behaviour if an individual also has the ability and believes in its efficacy to do so (i.e. the perceived behavioural control), and when the behaviour is considered acceptable or recommendable in society (i.e. norms).

Previous research in the P2P context based on the TPB aimed to explain platform usage intentions (Barnes & Mattsson, 2017; Becker-Leifhold, 2018; Bucher et al., 2016; Ek Styvén & Mariani, 2020; Hamari et al., 2016) or self-reported (non-objective measure of) behaviour (Hawlitschek et al., 2018b; Ni, 2021; Roos & Hahn, 2017). However, not all empirical tests of the TPB were theoretically complete. For instance, neither Hamari et al. (2016), Nadeem and Al-Imamy (2020), Ek Styvén and Mariani (2020), nor Ni (2021) measured social influence (i.e. norms) and they did not include perceived behavioural control in their model. Thus, the model tested in this study is more complete than models tested in previous research relating to the sharing economy.

Therefore, the right-hand side of our model is based on the TPB using the following hypotheses:

 $H_aA$  favourable attitude towards the sharing economy platform has a positive influence on the behavioural intention to use it.

 $H_b$  Norms have a positive influence on the behavioural intention to use the sharing economy platform.

 $H_c$  Perceived behavioural control has a positive influence on the behavioural intention to use the sharing economy platform.

#### 2.2. Balancing pro-social and economic tensions

Despite its potential for improved environmental performance (e.g. Heinrichs, 2013), the sharing economy phenomenon is most often discussed in terms of the business models operated by online platforms like Uber and Airbnb, as well the place that such practices should have in future urban contexts, and thus the importance of governance issues in 'sharing cities' (Barile et al., 2021; Cohen & Muñoz, 2016; McLaren & Agyeman, 2015; Mont et al., 2020). Some argued that the 'renting economy' or 'gig economy' might be better terms (Eckhardt & Bardhi, 2015; Hern, 2015; Roberts, 2015), since sharing economy platforms have brought on the monetisation of resources previously outside of a market (e.g. private cars, homes), with business models being based on matching people 'who offer services and others who are looking for them, thereby embedding extractive processes into social interactions' (Scholz, 2016, p. 4; see also Belk, 2014; Slee, 2015). Marketing scholars Bardhi and Eckhardt were the first to point out that "sharing" is just a fancy word for "rental" (Fournier et al., 2013) and that 'the Sharing Economy isn't about sharing at all' (Eckhardt & Bardhi, 2015). In essence, it is a contested concept, boundaries are blurred, and definitions vary (Acquier et al., 2017; Eckhardt et al., 2019; Fitzmaurice et al., 2018; Schor, 2016).

The proponents of 'true sharing' argue that the sharing economy is born out of communitarian, non-monetary, and non-reciprocal acts and processes (Belk, 2010; Ozanne & Ballantine, 2010). In opposition to the commercial nature of the contemporary phenomenon, based on rental exchanges between private people, participants in genuine sharing initiatives (e.g. borrowing, swapping, donating practices) were motivated by anti-capitalistic and anticonsumerist ideologies (Albinsson & Perera, 2012; Guillemot & Privat, 2019; Martin & Upham, 2016; Ozanne & Ballantine, 2010; Papaoikonomou & Valor, 2016). In line with previous research, we argue that people who are oriented towards sharing, which we define as the belief that an essential part of life is sharing things with others, are more likely to participate in P2P exchanges. Consequently, we also hypothesise that:

 $H_1$  Sharing orientation has a positive influence on norms, perceived behavioural control about the platform, and attitude towards the platform, which in turn influence the behavioural intention to use it.

Sharing economy businesses want to be associated with the positive connotations of the word community (i.e. social belonging, collective wellbeing, solidarity, support networks), which describes an existing set of (warm) relationships whereby members (a collective body of people) express a sense of common identity and characteristics. Indeed, consumers are putting an increased emphasis on the authenticity of the sharing experience and platform (Bucher et al., 2018; Hawlitschek et al., 2018a; Lalicic & Weismayer, 2018). Moreover, consumer beliefs about the contradiction between the sharing ethos and the market ethos are likely to influence consumers' platform usage intentions.

Hawlitschek et al. (2018a) define sharewashing as 'a platform operator's efforts of misleading consumers by purposely portraying an image of social and ecological principles while the platform's business model is actually cantered around delivering utilitarian value' (p. 2). In other words, a business that indulges in sharewashing is not loyal to the genuine sharing ethos. The perceived sharing authenticity of diverse online platforms, and the definitional issues of the sharing economy phenomenon, are the subjects

of many debates. For instance, a Swedish study reported vibrant discussions on Twitter about the roots of the phenomenon in the collaborative realm of civic societies and grassroots movements, while 90% of the chatter was related to commercial exchanges (Laurell & Sandström, 2017). Hawlitschek et al. (2018a) found that sharewashing perceptions negatively influence trust in a sharing economy platform (due to an increase in consumer confusion and the perceived risks of using a platform). Meanwhile, hospitality research on P2P accommodation (e.g. Airbnb) showed that the authenticity of the narrative of sharing economy platforms impacts guests' expectations (Bucher et al., 2018), and that one of the drivers of loyalty is the perceived authenticity of the experience (Lalicic & Weismayer, 2018). In business research, consumer-based brand authenticity that is founded on perceptions of heritage and sincerity has long been considered an asset (Napoli et al., 2014). Consequently, we hypothesise that:

H<sub>2</sub> Perceived platform sharing authenticity has a positive influence on norms, perceived behavioural control about the platform, and attitude towards the platform, which in turn influence the behavioural intention to use it.

Fehrer et al. (2018) and Breidbach and Brodie (2017) highlighted the trend of increasing actor engagement in value co-creation processes underpinning sharing economy platforms. Peer providers and consumers find technical support in using online platforms facilitating their exchanges, in the sense that each side of the platform is dependent on the other and both value mutual engagement. Moreover, the sharing economy phenomenon may have been born out of the digitalisation revolution, but it is deeply rooted in grassroots social innovation and the non-profit sector, relying on volunteers work and communities, in the sense that these pro-social values contrast with a commercial orientation (Guillemot & Privat, 2019; Martin et al., 2015; Martin & Upham, 2016). How platform users perceive the engagement of others is likely to influence their attitude towards using a platform. Finally, the platform actors' engagement is also the key to increasing customer loyalty (Kumar et al., 2018). In their study of P2P rental platforms and their interviews with users, Philip et al. (2015) denote the 'high-involvement' (i.e. great efforts) that these exchanges require. While they consider this high level of involvement in the context of renting goods to be a practical barrier due to the inconvenience, and due to people's attachment to their possessions, we argue that the perception that a platform is both engaged with and supported by its grassroots community (e.g. volunteers) is an advantage rather than a deterrent. Consequently, we also hypothesise that:

 $H_3$  Grassroots engagement has a positive influence on norms, perceived behavioural control about the platform, and attitude towards the platform, which in turn influence the behavioural intention to use it.

In one of the first sharing economy studies, Moeller and Wittkowski (2010) found that a 'belief in a modern lifestyle' was a motive for participating in the P2P rental of clothes. Moreover, Akbar et al. (2016) also argued that commercial sharing systems like Zipcar can satisfy people's 'desire for unique consumer products' while Lang and Joyner Armstrong (2018) found that a 'need for uniqueness' was among the personality traits of consumers renting or swapping clothing. Lastly, one can argue that the digitalisation engine of the sharing economy makes it something cool to try out, being representative of contemporary modes of consumption and enabling people to live an access lifestyle (see Rifkin, 2000), where owning and accumulating things is not fashionable anymore, while minimalism still is. Consequently, we also hypothesise that:

 $H_4$  Trend orientation has a positive influence on norms, perceived behavioural control about the platform, and attitude towards the platform, which in turn influence the behavioural intention to use it.

#### 3. Method

#### 3.1. Research settings

To collect the data for hypothesis testing, we conducted a survey of carpooling participants. The Carpooling Group (CG)<sup>2</sup> was started in 2007 in Sweden as a grassroots movement<sup>3</sup> to promote and facilitate the organisation of carpooling. The theoretical constructs of our conceptual model are operationalised and have been adapted from previous studies in the sharing economy context, or from marketing research on online communities or brand authenticity (see Table 1): i.e. *Trend orientation* (Moeller & Wittkowski, 2010), *Sharing orientation* (Akbar et al., 2016), *Perceived sharing authenticity of a platform* (Napoli et al., 2014), as well as our own items for *Engagement in the grassroots movement*. TPB measures (*behavioural intention, attitude, perceived behavioural control*, and *norms*) were adapted from Hawlitschek et al. (2018b) and following Ajzen's (1991, 2019). Between 2 and 20 December 2019, 655 members of the CG community participated in the online survey (in Swedish) – a short introduction explained the research purpose and the scope of the survey, as well as the incentive (i.e. a lottery with 50 cinema tickets as prizes). A reminder was sent out 9 days after the initial invitation.

#### 3.2. Sample characteristics

Based on the minimum  $R^2$  method is commonly used in marketing research to determine the minimal sample size (Hair et al., 2019), and considering that our model has a maximum of four paths directed towards the latent variables, and a decided significance level at  $\alpha = 5\%$ , effect sizes  $f^2 = 0.05$  and a minimum  $R^2 = 0.25$ , means that our sample of 655 is large enough for PLS-SEM in terms of statistical power analyses (Hair et al., 2022). The study sample (see Table 2) was based on actual sharing economy population (i.e. members of the CG), contrary to the majority of studies of sharing economy platforms which are based on student pools (e.g. Hawlitschek et al., 2018b; Möhlmann, 2015) or consumers panel (e.g. Nadeem & Al-Imamy, 2020; Ni, 2021). The average age is 42.16 years, as the sample is not only composed of students (i.e. 11.9%) usually asking for rides as passengers (i.e. the role of consumer in the sharing economy), but also of older individuals such as employees (59.2%), entrepreneurs (9%), or even pensioners (7%), who are more likely to offer rides as drivers (i.e. the role of the peer provider in the sharing economy). Among the study participants, 574 (87.6%) have driver's licenses. Concerning access to a car (i.e. not ownership in particular), 332 participants (50.7%) always have access to a car while 101 (15.4%) never have access to a car, with 222 (33.9%) having access irregularly (i.e. from less than once a week to several times a week). In our sample, 78 respondents (11.9%) have shared rides in the past year, while 64 (9.8%) tried but did not actually find anybody to travel with. Compared to France or Germany, where carpooling is very popular due to, for instance, dense metropolitan areas and good road infrastructures (Guyader, 2018), carpooling in Scandinavia is less common. Like our results, a qualitative study in Denmark also found that only 18.2% of participants had any actual carpooling experience (Nielsen et al., 2015).

#### 3.3. Methodological procedures

Partial-least square structural equation modelling (PLS-SEM) is a method based on OLS (Hair et al., 2022). Compared to covariance-based SEM, PLS-SEM has been considered more prediction-oriented (since the method aims at maximising the explained variance both in structural and measurement models – rather than explaining covariances), such as this causal-predictive perspective is totally suitable to theory testing (Sarstedt et al.,

Table 1. Measurement items of the constructs.

Item (original items adapted from)	N	Mean	SD	Skewness	Kurtosis	Loading
Sharing orientation (Akbar et al., 2016)						
I would try to share rides even if the CG* did not exist.	524	5.39	1.804	-2.734	-0.170	0.442
I think that it is important to share.	634	5.92	1.273	-1.262	1.563	0.925
I plan to buy less and to share with others instead.	564	5.13	1.743	-0.740	-0.371	0.827
Trend orientation (Moeller & Wittkowsl	ci, 201	0)				
Carpooling is a new and unique phenomenon for me.	603	3.63	2.129	-2.931	0.024	0.589
It is important that a carpooling platform looks modern.	583	4.84	1.834	-0.568	0646	0.686
It is important to follow the latest lifestyle trends.	607	3.00	1.886	0.667	-0.633	0.886
Platform authenticity (Napoli et al., 201	4)					
The CG represents an authentic sharing culture.	500	5.51	1.430	-0.808	0.207	0.903
The CG is loyal to its original values.	249	5.62	1.333	-0.827	0.062	0.953
<b>Grassroots engagement</b> (own measures) It is important to me that the CG is a participatory movement.	573	5.40	1.717	-0.991	0.145	0.728
It is important to me as a participant to get involved in the CG movement.	563	3.21	1.877	0.490	-0.849	0.906
It is important to me as a participant to get involved in the non-profit association the CG.	563	2.79	1.807	0.762	-0.472	0.883
Attitude towards the CG platform (Hav	vlitsch	ek et al	2018b)			
Participating in the CG is a good idea.	606	6.16	1.207	-1.649	2.765	0.831
I like to participate in the CG.	479	5.36	1.597	-0.641	-0.554	0.872
Participating in the CG is nice.	425	5.34	1.540	-0.565	-0.539	0.899
Norms regarding the CG platform (Hav	wlitsch	ek et al.	, 2018b)	)		
Those who care about me think I should join the CG.	253	3.70	2.154	0.161	-1.297	0.982
Those who care about me prefer me to participate in the CG.	240	3.45	2.166	0.354	-1.258	0.980
I feel an obligation to share rides.	593	3.41	2.025	0.357	-1.085	0.625
Perceived behavioural control of using	the C	G platfo	rm (Hav	wlitschek et	al., 2018b)	
I think it is easy to participate in the CG.	474	4.03	1.869	0.063	-1.067	0.848
Participating in the CG is within my control.	482	4.74	1.892	-0.499	-0.856	0.891
I have the resources, knowledge and abilities to participate in the CG.	535	5.20	1.783	-0.823	-0.292	0.817
Behavioural intention to use the CG pla	atform	(Hawlit	tschek e	t al., 2018b)		
I intend to participate in the CG in the future.	522	5.44	1.492	-0.868	0.265	0.903
I will always try to participate in the CG.	458	4.76	1.875	-0.472	-0.868	0.890
I plan to participate in the CG as often as I can.	519	4.58	1.895	-0.334	-0.932	0.862

Note: Items were measured on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).  $^{*}$ CG = Carpool Group

Table 2. Sample demographics.

Gender	N	%	Age (average):		42.16
Man	260	39.7			
Woman	366	55.9	Education		
Other	18	2.7	(average no. of years):		16.13
Not available	11	1.7			
Urban population (no. of inhabitants)	N	%	Occupation	N	%
			Employee	388	59.2
			Self-employed	59	9.0
1–500	47	7.2	Student	78	11.9
501–3000	49	7.5	Housewife/-husband	1	0.2
3001-8000	33	5.0	On parental leave	8	1.2
8001–25,000	61	9.3	Retired	46	7.0
25,001–100,000	129	19.7	Jobless	36	5.5
More than 100,000	316	48.2	Sick	39	5.9
Not available	20	3.1	Not available	-	_
Household composition	N	%	Household income	N	%
Alone, without children	232	35.4	Less than 2400€	150	22.9
Alone, with 1 child	28	4.3	2400€–3400€	114	17.4
Alone, with 2 children	19	2.9	3500€–4400€	107	16.3
Alone, with 3 + children	5	0.8	4500€–5400€	50	7.6
With someone, without children	223	34.0	5500€–6400€	46	7.0
With someone, with 1 child	63	9.6	6500€–7400€	50	7.6
With someone, with 2 children	50	7.6	7500€–8400€	30	4.6
With someone, with 3 + children	35	5.3	More than 8400€	38	6.5
Not available	_	_	Not available	70	10.7

2022), and appropriate when the model is complex – with many indicators, constructs, and relationships (Hair et al., 2019). The reliability (internal consistency), convergent validity and discriminant validity of the measures and constructs were established (see Table 3, as well as Appendices 1 and 2) before assessing the model's structural relationships. The

Table 3. Measurement model: reliability and validity.

_		Valid						
Construct	Indicators	N	Mean	SD	CA	$ ho_{ m C}$	$ ho_{ m A}$	AVE
Sharing orientation	3	465	5.457	1.013	0.575	0.781	0.696	0.563
Platform authenticity	2	247	5.638	0.997	0.858	0.929	0.888	0.867
Trend orientation	3	533	3.878	1.004	0.557	0.766	0.636	0.530
Grassroots engagement	3	504	3.831	1.001	0.786	0.876	0.894	0.710
Attitude towards the CG	3	408	5.700	0.996	0.844	0.904	0.850	0.759
Norms regarding the CG	3	226	3.578	1.010	0.813	0.900	0.928	0.756
Perceived behavioural control of using the CG	3	431	4.688	0.995	0.825	0.892	0.832	0.734
Behavioural intention to use the CG	3	419	5.031	0.993	0.878	0.920	0.880	0.794

Note: Constructs assessed using: CA = standardized Cronbach's Alpha (reliability measure limited by the assumption that all indicators are equally reliable);  $\rho$ C = composite coefficient (reliability measure prioritising indicators according to their individual reliability and most-suited to PLS-SEM);  $\rho$ A = approximately exact (or consistent) coefficient (reliability measure considered as good compromise as it lies between CA and  $\rho$ C); and AVE = Average Variance Extracted (convergent validity). In addition, discriminant validity was established the heterotrait-monotrait (HTMT) ratios which are all below 0.61 and the confidence intervals (estimated using the bootstrapping procedure) exclude 1 (see Appendix 1). There are no multicollinearity issues to report (see Appendix 2).

survey data was analysed following the latest guidelines (Hair et al., 2019, 2022; Ringle & Sarstedt, 2016; Sarstedt et al., 2022; Shmueli et al., 2019), using SmartPLS v.4.0.8.4 (Ringle et al., 2022): the PLS algorithm was used to estimate the path coefficients ( $\beta$ ) and their effect sizes ( $f^2$  values) of the structural model (with max. 300 iterations and pairwise deletion to handle missing values<sup>4</sup>), the PLSpredict procedure (with ten folds, ten repetitions, and pairwise deletion) was used to assess the out-of-sample predictive power (i.e. accuracy in predicting the outcome values) of our model, the bootstrapping procedure (with 10,000 samples, pairwise deletion algorithm, Bias-Corrected and Accelerated confidence interval estimation method, two-tailed testing at the 0.05 level) to estimate statistical significance, and the importance-performance map analysis (IPMA) to provide relevant managerial insights.

#### 4. Results

Estimates of the model's structural relationships are reported in Figure 2 and Table 4. Concerning the effects of the Theory of Planned Behaviour, *norms regarding the Carpooling Group (CG)* have a significant medium positive influence on *behavioural intention to use the platform, attitude towards the CG* has a significant small positive influence on *behavioural intention to use the platform*, like *perceived behavioural control* of using the platform.

Concerning the effects of the determinants, sharing orientation has a significant small positive direct effect on attitude towards the CG and norms but not on perceived behavioural control. Platform authenticity has a significant medium positive direct effect on attitude towards the CG and perceived behavioural control but not on norms. Grassroots engagement has a significant small positive direct effect on attitude towards the CG and perceived behavioural control, and a medium positive effect on norms. Trend orientation has a significant medium direct influence on norms, but none on attitude towards the CG and perceived behavioural control. None of these four determinants have a direct influence on behavioural intention to use the CG, as attitude towards the CG, perceived behavioural control and norms are full mediators.

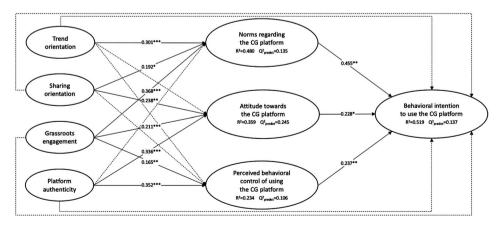


Figure 2. Path estimates and statistical significance. Note: \*\*\* n < 0.001: \*\* n < 0.01: \* n < 0.05 (two tailed)

Note: \*\*\* p < 0.001; \*\* p < 0.01; \* p < 0.05 (two-tailed); dotted paths illustrate non-statistically significant relationships. The percentage of explained variance (i.e.  $R^2$ ) can be considered substantial for *behavioural intention to use the CG* (51.91%), moderate for *attitude towards the CG* (35.85%) and norms (48%), and weak for *perceived behavioural control* (23.39%). The  $Q^2_{predict}$  values (obtained from the PLSpredict procedure) indicate that the model has high predictive relevance (see also Appendix 3).

Table 4. Structural model (path analysis).

Direct effects	β	$f^2$	t	p	CI [2.5%	-97.5%]
Sharing Orientation → Attitude	0.238	0.070	3.000	0.003	0.072	0.381
Sharing Orientation → Norms	0.192	0.055	2.193	0.028	0.012	0.355
Sharing Orientation →	0.000	0.000	0.001	0.999	-0.185	0.157
Perceived Behavioural						
Control						
Sharing Orientation →	-0.088	0.012	1.080	0.280	-0.251	0.056
Behavioural Intention						
Platform Authenticity →	0.336	0.120	3.583	0.000	0.158	0.528
Attitude						
Platform Authenticity →	0.023	0.001	0.219	0.826	-0.184	0.236
Norms						
Platform Authenticity →	0.352	0.111	3.396	0.001	0.156	0.557
Perceived Behavioural						
Control						
Platform Authenticity →	0.105	0.013	0.838	0.402	-0.148	0.339
Behavioural Intention						
Trend Orientation → Attitude	-0.022	0.001	0.419	0.675	-0.129	0.078
Trend Orientation → Norms	0.301	0.146	4.395	0.000	0.158	0.427
Trend Orientation → Perceived	0.081	0.007	1.403	0.161	-0.037	0.190
Behavioural Control						
Trend Orientation $\rightarrow$	-0.071	0.008	0.800	0.424	-0.248	0.082
Behavioural Intention						
Grassroots engagement →	0.211	0.059	4.339	0.000	0.115	0.306
Attitude						
Grassroots engagement →	0.368	0.213	5.255	0.000	0.231	0.506
Norms						
Grassroots engagement →	0.165	0.030	3.014	0.003	0.058	0.271
Perceived Behavioural						
Control						
Grassroots engagement →	0.012	0.000	0.141	0.888	-0.153	0.148
Behavioural Intention		0.060	2 42 6	0.04.	0.040	0.407
Attitude → Behavioural	0.228	0.060	2.436	0.015	0.040	0.406
Intention	0.455	0.206	2.525	0.006	0.106	0.565
Subjective norms →	0.455	0.206	2.725	0.006	0.186	0.767
Behavioural Intention	0.227	0.001	2.075	0.002	0.001	0.200
Perceived Behavioural	0.237	0.081	2.975	0.003	0.081	0.388
Control → Behavioural						
Intention Control: Income → Perceived	0.137	0.021	2.526	0.012	0.030	0.242
	0.137	0.021	2.320	0.012	0.030	0.242
Behavioural Control	0.121	0.020	2.417	0.016	0.222	0.024
Control: Age → Attitude Control: Gender → Perceived	-0.121		2.417		-0.223	-0.024
Behavioural Control	-0.111	0.014	2.094	0.036	-0.208	0.002
Deliavioural Collinoi						

Note:  $\beta$  = standardized path coefficient estimates.  $f^2$  = effect sizes; considered small above 0.02, medium above 0.15 and large above 0.35. CI = 95% confidence intervals (bias corrected) of path coefficients (estimated using the bootstrapping procedure).

Moreover, the  $Q^2_{predict}$  values are all above 0, which confirms that the model outperformed the naïve benchmark. Second, the prediction-error distribution for *behavioural intention* (i.e. endogenous constructs) visually follows a symmetrical bell-curved shape such as we examined whether the Root Mean Squared Error (RMSE) results in the PLS-SEM were lower than the Linear regression Model (LM) RMSE results (see

Appendix 3). All indicators score lower on the RMSE in the PLS-SEM than the LM, which confirms that our model has high predictive power (Shmueli et al., 2019).

The total effects of *sharing orientation*, and *trend orientation* are considered small, while the total effects of *platform authenticity* and *grassroots engagement* are medium (see Appendix 4). Ultimately, among the control variables, *age* has a significant, small positive influence on *attitude towards the CG*, and *income* and *gender* have a significant, small positive influence on *perceived behavioural control of using the CG platform*. No other relationships between the model's constructs and control variables are significant.

#### 5. Discussion

This research considered the tensions between the historical sharing practices and the new trend of sharing economy platforms, through four influential determinants of behavioural intention to use a carpooling platform: perceived sharing authenticity (for example, whether or not the platform represents the authentic sharing practice that it facilitates; i.e. loyal to the original carpooling practice aimed at sharing travel costs and reducing the environmental impact of car trips), grassroots engagement (i.e. the importance of being a non-profit organisation driven by volunteers, whose members feel involved), sharing orientation (i.e. inclination toward sharing usage instead of buying/owning), and lifestyle trend orientation (i.e. the belief that carpooling is trendy and the importance of a platform looking modern). This study contributes threefold to the body of research on the sharing economy, including theoretical implications, and recommendations for platform managers and policy makers. First, we extend current knowledge of beliefs and attitudes for using a sharing economy platform, and our model integrates and weighs-in the paradoxical tensions between pro-social and economic tensions of the sharing economy phenomena. Second, we provide guidelines to help platform managers increase people's favourable attitudes to participating in the sharing economy. Third, we provide policy recommendations and discuss governmental implications related to governance.

#### 5.1. Theoretical implications

While the relevance of the TPB to gaining insights into sharing economy participation is well-established, several published studies do not include measures of perceived behavioural control, or norms (Barnes & Mattsson, 2017; Becker-Leifhold, 2018; Bucher et al., 2016; Ek Styvén & Mariani, 2020; Hamari et al., 2016; Hawlitschek et al., 2018b; Nadeem & Al-Imamy, 2020; Ni, 2021; Roos & Hahn, 2017). As such, this study contributes toward providing a more complete evaluation than previous research. We find that attitudes to the platform, norms and perceived behavioural control all influence the behavioural intention to participate ( $H_{\text{a-b-c}}$  supported).

The other critical parts of our model explaining attitude towards a sharing economy platform emanate from the inherent paradox of practices at the intersection between 'true sharing' and market transactions (Belk et al., 2019; Eckhardt et al., 2019; Habibi et al., 2016). On the one hand, the pro-social sharing ethos is operationalised using measures of grassroots engagement and sharing orientation, while on the other, the market ethos is operationalised using measures of lifestyle trend orientation and reverse sharewashing (i.e. perceived sharing authenticity). We found that the platform's grassroots engagement, its sharing authenticity, and people's sharing orientation are strong determinants of people's attitude towards the platform (H<sub>1</sub>, H<sub>2</sub>, H<sub>3</sub> supported). This is largely in line with previous research on genuine sharing and collaborative consumption practices

(Albinsson & Perera, 2012; Guillemot & Privat, 2019; Guyader, 2018; Hawlitschek et al., 2018a, 2018b; Martin et al., 2015; Martin & Upham, 2016; Ozanne & Ballantine, 2010; Papaoikonomou & Valor, 2016; Philip et al., 2015).

However, the trendiness of the sharing economy phenomenon and lifestyle is not an important characteristic ( $H_4$  not supported). Despite that early research on rental platforms (e.g. Moeller & Wittkowski, 2010) and car sharing (e.g. Akbar et al., 2016) established that the novelty of the sharing economy drives the formation of a favourable attitude, it is undeniable that such practices became more popular and thus, the personal trait of trend orientation matter less now, as trend-followers look for even newer and trendier consumption experiences to try.

#### 5.2. Managerial recommendations

Taken together, our results indicate that sharing economy platforms should not commit to the sin of sharewashing but should put their efforts into staying true to the sharing ethos. Digitalisation can optimise older sharing practices such as hitchhiking, but online platforms facilitating the contemporary practice of organised carpooling need to be embedded in the original sharing values to raise usage intention.

The IPMA (see Appendix 5) enables to simultaneously consider the (unstandardised) total effects (i.e. both direct and indirect effects) of each antecedents of behavioural intention (i.e. the endogenous construct of interest here), which represent their relative importance; with the latent variable scores, which represent their relative performance (Ringle & Sarstedt, 2016). The IPMA results in a map, where the most important constructs are positioned towards the right-hand side (i.e. platform authenticity, and grassroots engagement), and the most performant constructs are positioned higher (i.e platform authenticity again, and sharing orientation as close second). As such, the constructs for which there is a high potential for improvement are those positioned in the lower right-hand These results indicate that sharing economy managers should not target people who are inclined to follow the latest consumption trends (since trend orientation has the least combined importance-performance index) but more those who are likely to engage in the community surrounding the practice (since grassroots engagement is positioned on the lower right-hand corner) and those who are into the authentic sharing culture and ethos. Managers should put more effort into involving platform users so they perceive a higher level of engagement; they should also focus on staying true to the original practice facilitated by the platform, bearing in mind that this is something they can directly act upon.

#### 5.3. Policy implications

Based on the current trends underlying the sharing economy phenomenon, one of the future scenarios is platforms evolving as 'Social Bubbles' (Fehrer et al., 2018), whereby they extend and diversify their portfolio of services (e.g. Guyader & Piscicelli, 2019) with enhanced connectivity between platform users and thus more social interactions. It seems that platforms facilitating collaboration and P2P exchanges will increase in number and gain new sectors, showing the importance of social factors (e.g. community belonging, perceived authenticity) for the future development of the sharing economy. Municipalities should watch out for the transition sharing cities (e.g. Barile et al., 2021; Cohen & Muñoz, 2016; McLaren & Agyeman, 2015; Mont et al., 2020) so as to promote a more pro-social sharing economy rather than one fully dominated by the market logic. Such future trajectory that sticks to the social aspects of connecting people can be led by the state (rather than led by capitalists

with monopolistic super-platforms), for example with a redistribution of the gains from sharing from the winners to the losers (Frenken, 2017). Regardless, policies are needed to ensure that, despite the socio-economic tensions of the sharing economy paradox that endure (Belk et al., 2019; Eckhardt et al., 2019), there are no barriers for consumers to access shared mobility services where they are relevant and efficient.

In light of the COVID-19 pandemic, these forecasts may be altered. Indeed, due to the risk of spreading the coronavirus in Sweden (as facemasks were neither widely available yet, nor recommended by the government) and to respect a minimum physical distance between strangers, the CG Facebook group was put 'on pause' from March 2020 until July 2021; hence, it could not be used to facilitate carpooling among its 55,000 members. In other words, the COVID-19 pandemic has tremendously impacted the shared mobility sector, and not just in Sweden. For example, BlaBlaCar's recovery in France as travel restrictions were lifted, indicates that carpooling organisations can benefit from the solidarity arising within society and the increase in local neighbourhood support more than they can lose out over contagion concerns and the fear of strangers.

#### 5.4. Further research

There may be some non-linear relationships that have not been captured in the present study, in the sense that paths between variables may vary in importance for different segments of people. We are confident, though, that we have estimated a valid model and identified important general paths when clarifying our understanding of the paradoxical tensions existing between the various factors related to the intention to use a sharing economy platform in the context of carpooling. To find potential nuances of these findings, fellow researchers could study the phenomena by collecting data in other contexts (e.g. P2P car rentals, accommodation rentals), by testing a more complete TPB model (e.g. including behavioural measures), and by conducing additional PLS-SEM analyses (e.g. Sukhov et al., 2022). One way of doing this would be to apply necessity and sufficiency logics in order to capture variations in the configurations of variables of importance to intention. For example, it may then be possible to answer: (i) whether sharing orientation could be ignored or if this is a necessary but insufficient condition of explaining participation; (ii) whether there are several different configurations of variables that can lead to the same outcome of a strong intention to use a sharing economy platform; (iii) whether perceived authenticity is present in all configurations of the variables leading to more positive attitudes towards a platform; and (iv) how the findings observed in our empirical material relate to different segments of people. Future research also needs to continue to assess the social benefits and positive externalities brought by shared mobility and to make social benefits of various mobility systems visible.

#### 6. Conclusion

This study shows that having a sharing orientation and caring for grassroots engagement were significant determinants of a positive attitude towards participating in the sharing economy. That is why we can hold on to hopeful growth scenarios for the shared mobility sector in the post-COVID-19 world. We foresee increased participation in carpooling, among other contemporary P2P practices facilitated by online platforms operated by organisations with a sharing ethos, and which symbolise an authentic evolution out of original sharing practices (e.g. local ecosystems for grassroots sharing projects like time banking, community gardens, tool libraries, maker spaces, community currencies, which are all far from being new). In short, this study emphasises the importance of the social logic in the future (e.g. for sharing cities).

Nevertheless, our study's generalizability can be limited, mostly by the facts that our quantitative data came from the Swedish shared mobility context, and that we measured behavioural intentions (and not behaviour per se). Such limitations provide opportunities for future research (as evoked in the previous section) to replicate our findings in other countries, with other collaborative practices, and with actual behavioural measures (e.g. transactional data); as well as to further reveal new influential factors or deepen and contextualised the relationships we found with qualitative data collection. Another potential limitation comes from the fact that the CG was founded as a civil society initiative, such as our study sample could partly influence the results about *grassroots engagement* and *trend orientation*. For commercial for-profit ventures in the sharing economy, the importance of *grassroots engagement* for its customers/users might be diminished and inversely the *trend orientation* effect might be stronger and thus more important to attract new customers (e.g. when launching a new initiative).

In conclusion, this empirical study answers the call for research to investigate the sharing economy and clarify our understanding of its paradoxical tensions (Eckhardt et al., 2019). This is also the first consumer research focused on the specific tensions between pro-social and economic factors influencing participation in collaborative consumption, which is fundamentally different from the rental services offered by firms where customers do not meet (e.g. Akbar et al., 2016), and different from recirculation and second-hand platforms where goods' ownership change (e.g. Albinsson & Perera, 2012; Ek Styvén & Mariani, 2020; Lang & Joyner Armstrong, 2018).

#### **Notes**

- In this paper, the North American terminology was adopted for the practice of carpooling, which
  is sometimes called ridesharing in Europe, or even lift-sharing in the UK. As such, carpooling is
  fundamentally different from both ride-hailing services (as offered by Uber) and taxi services in
  that no monetary gain is made by carpooling drivers.
- 2. skjutsgruppen.nu
- 3. There are more than 55,000 members (facebook.com/groups/skjutsgruppen) December 2019.
- 4. Missing values at random.

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#### References

Acquier, A., Daudigeos, T., & Pinkse, J. (2017). Promises and paradoxes of the sharing economy: An organizing framework. *Technological Forecasting and Social Change*, 125(12), 1–10. https://doi.org/10.1016/j.techfore.2017.07.006

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

- Ajzen, I. (2019). Constructing a theory of planned behavior questionnaire. University of Massachusetts. Retrieved June 26, 2021, from https://people.umass.edu/aizen/pdf/tpb.measurement.pdf
- Akbar, P., Mai, R., & Hoffmann, S. (2016). When do materialistic consumers join commercial sharing systems. *Journal of Business Research*, 69(10), 4215–4224. https://doi.org/10.1016/ j.jbusres.2016.03.003
- Albinsson, P. A., & Perera, B. Y. (2012). Alternative marketplaces in the 21st century: Building community through sharing events. *Journal of Consumer Behaviour*, 11(4), 303–315. https://doi.org/10.1002/cb.1389
- Barile, S., Ciasullo, M. V., Iandolo, F., & Landi, G. C. (2021). The city role in the sharing economy: Toward an integrated framework of practices and governance models. *Cities*, 119(12), 103409. https://doi.org/10.1016/j.cities.2021.103409
- Barnes, S. J., & Mattsson, J. (2017). Understanding collaborative consumption: Test of a theoretical model. *Technological Forecasting and Social Change*, 118, 281–292. https://doi.org/10.1016/ j.techfore.2017.02.029
- Becker-Leifhold, C. V. (2018). The role of values in collaborative fashion consumption A critical investigation through the lenses of the theory of planned behavior. *Journal of Cleaner Production*, 199, 781–791. https://doi.org/10.1016/j.jclepro.2018.06.296
- Belk, R. W. (2010). Sharing. *Journal of Consumer Research*, 36(5), 715–734. https://doi.org/10.1086/612649
   Belk, R. W. (2014). You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, 67(8), 1595–1600. https://doi.org/10.1016/j.jbusres.2013.10.001
- Belk, R. W., Eckhardt, G. M., & Bardhi, F. (2019). The paradox of the sharing economy. In R. W. Belk, G. M. Eckhardt, & F. Bardhi (Eds.), *Handbook of the sharing economy* (pp. 1–8). Edward Elgar Publishing.
- Botsman, R., & Rogers, R. (2010). What's mine is yours: The rise of collaborative consumption. HarperCollins. Breidbach, C. F., & Brodie, R. J. (2017). Engagement platforms in the sharing economy. Journal of Service Theory and Practice, 27(4), 761–777. https://doi.org/10.1108/JSTP-04-2016-0071
- Bucher, E., Fieseler, C., Fleck, M., & Lutz, C. (2018). Authenticity and the sharing economy. Academy of Management Discoveries, 4(3), 294–313. https://doi.org/10.5465/amd.2016.0161
- 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(September), 316–326. https://doi.org/10.1016/j.chb.2016.04.002
- Cohen, B., & Kietzmann, J. (2014). Ride on! Mobility business models for the sharing economy. Organization & Environment, 27(3), 279–296. https://doi.org/10.1177/1086026614546199
- Cohen, B., & Muñoz, P. (2016). Sharing cities and sustainable consumption and production: Towards an integrated framework. *Journal of Cleaner Production*, 134, 87–97. https://doi.org/10.1016/j.jclepro.2015.07.133
- Eckhardt, G. M., & Bardhi, F. (2015). *The sharing economy isn't about sharing at all*. Harvard Business Review. Retrieved June 26, 2021, from https://hbr.org/2015/01/the-sharing-economy-isnt-about-sharing-at-all
- Eckhardt, G. M., Houston, M. B., Jiang, B., Lamberton, C., Rindfleisch, A., & Zervas, G. (2019). Marketing in the sharing economy. *Journal of Marketing*, 83(5), 5–27. https://doi.org/10.1177/0022242919861929
- Ek Styvén, M., & Mariani, M. M. (2020). Understanding the intention to buy secondhand clothing on sharing economy platforms: The influence of sustainability, distance from the consumption system, and economic motivations. *Psychology & Marketing*, *37*(5), 724–739. https://doi.org/10.1002/mar.21334
- European Commission. (2018). Flash Eurobarometer 467. The use of the collaborative economy. TNS Political & Social. Retrieved June 26, 2021, from https://op.europa.eu/s/omvh
- Fehrer, J. A., Benoit, S., Aksoy, L., Baker, T. L., Bell, S. J., Brodie, R. J., & Marimuthu, M. (2018). Future scenarios of the collaborative economy: Centrally orchestrated, social bubbles or decentralized autonomous? *Journal of Service Management*, 29(5), 859–882. https://doi. org/10.1108/JOSM-04-2018-0118
- Fitzmaurice, C. J., Ladegaard, I., Attwood-Charles, W., Cansoy, M., Carfagna, L. B., Schor, J. B., & Wengronowitz, R. (2018). Domesticating the market: Moral exchange and the sharing economy. *Socio-Economic Review*, 18(1), 81–102. https://doi.org/10.1093/ser/mwy003
- Fournier, S., Eckhardt, G. M., & Bardhi, F. (2013). Learning to play in the new "share economy". *Harvard Business Review*, 91(7-8), 125–129. https://hbr.org/2013/07/learning-to-play-in-the-new-share-economy

- Frenken, K. (2017). Political economies and environmental futures for the sharing economy. Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences, 375(2095), 20160367. https://doi.org/10.1098/rsta.2016.0367
- Guillemot, S., & Privat, H. (2019). The role of technology in collaborative consumer communities. *Journal of Services Marketing*, 33(7), 837–850. https://doi.org/10.1108/JSM-12-2018-0361
- Guyader, H. (2018). No one rides for free! Three styles of collaborative consumption. *Journal of Services Marketing*, 32(6), 692–714. https://doi.org/10.1108/JSM-11-2016-0402
- Guyader, H., & Piscicelli, L. (2019). Business model diversification in the sharing economy: The case of GoMore. *Journal of Cleaner Production*, 215, 1059–1069. https://doi.org/10.1016/j. jclepro.2019.01.114
- Habibi, M. R., Kim, A., & Laroche, M. (2016). From sharing to exchange: An extended framework of dual modes of collaborative nonownership consumption. *Journal of the Association for Consumer Research*, 1(2), 277–294. https://doi.org/10.1086/684685
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A primer on partial least squares structural equation modeling (PLS-SEM) (3rd ed.). Sage.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. European Business Review, 31(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203
- 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(9), 2047–2059. https://doi.org/10.1002/asi.23552
- Hawlitschek, F., Stofberg, N., Teubner, T., Tu, P., & Weinhardt, C. (2018a). How corporate share-washing practices undermine consumer trust. *Sustainability*, 10(8), 2638–2656. https://doi.org/10.3390/su10082638
- Hawlitschek, F., Teubner, T., & Gimpel, H. (2018b). Consumer motives for peer-to-peer sharing. *Journal of Cleaner Production*, 204, 144–157. https://doi.org/10.1016/j.jclepro.2018.08.326
- Heinrichs, H. (2013). Sharing economy: A potential new pathway to sustainability. *GAIA Ecological Perspectives for Science and Society*, 22(4), 228–231. https://doi.org/10.14512/gaia.22.4.5
- Hern, A. (2015). Why the term 'sharing economy' needs to die. *The Guardian*. Retrieved June 26, 2021, from http://www.theguardian.com/technology/2015/oct/05/why-the-term-sharing-economy-needs-to-die
- Jin, S. T., Kong, H., Wu, R., & Sui, Z. D. (2018). Ridesourcing, the sharing economy, and the future of cities. Cities, 76(6), 96–104. https://doi.org/10.1016/j.cities.2018.01.012
- Kumar, V., Lahiri, A., & Dogan, O. B. (2018). A strategic framework for a profitable business model in the sharing economy. *Industrial Marketing Management*, 69(April), 147–160. https://doi. org/10.1016/j.indmarman.2017.08.021
- Küper, I., & Edinger-Schons, L. M. (2020). Is sharing up for sale? Monetary exchanges in the sharing economy. *Journal of Business Research*, 121, 223–234. https://doi.org/10.1016/j.jbusres.2020.08.020
- Lalicic, L., & Weismayer, C. (2018). A model of tourists' loyalty: The case of Airbnb. *Journal of Hospitality and Tourism Technology*, 9(1), 80–93. https://doi.org/10.1108/JHTT-02-2017-0020
- Lang, C., & Joyner Armstrong, C. M. (2018). Collaborative consumption: The influence of fashion leadership, need for uniqueness, and materialism on female consumers adoption of clothing renting and swapping. Sustainable Production and Consumption, 13, 37–47. https://doi.org/ 10.1016/j.spc.2017.11.005
- Laurell, C., & Sandström, C. (2017). The sharing economy in social media: Analyzing tensions between market and non-market logics. *Technological Forecasting and Social Change*, 125 (5), 58–65. https://doi.org/10.1016/j.techfore.2017.05.038
- 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, 204– 213. https://doi.org/10.1016/j.jclepro.2015.04.062
- Martin, C. J., Upham, P., & Budd, L. (2015). Commercial orientation in grassroots social innovation: Insights from the sharing economy. *Ecological Economics*, 118(October), 240–251. https://doi.org/10.1016/j.ecolecon.2015.08.001
- McLaren, D., & Agyeman, J. (2015). Sharing cities: A case for truly smart and sustainable cities. MIT Press.
- Moeller, S., & Wittkowski, K. (2010). The burdens of ownership: Reasons for preferring renting. Managing Service Quality: An International Journal, 20(2), 176–191. https://doi.org/10. 1108/09604521011027598

- Möhlmann, M. (2015). Collaborative consumption: Determinants of satisfaction and the likelihood of using a sharing economy option again. *Journal of Consumer Behaviour*, *14*(3), 193–207. https://doi.org/10.1002/cb.1512
- Mont, O., Palgan, Y. V., Bradley, K., & Zvolska, L. (2020). A decade of the sharing economy: Concepts, users, business and governance perspectives. *Journal of Cleaner Production*, 269 (October), 122215. https://doi.org/10.1016/j.jclepro.2020.122215
- Nadeem, W., & Al-Imamy, S. (2020). Do ethics drive value co-creation on digital sharing economy platforms? *Journal of Retailing and Consumer Services*, 55, 102095. https://doi.org/10.1016/j. jretconser.2020.102095
- Napoli, J., Dickinson, S. J., Beverland, M. B., & Farrelly, F. (2014). Measuring consumer-based brand authenticity. *Journal of Business Research*, 67(6), 1090–1098. https://doi.org/10. 1016/j.jbusres.2013.06.001
- Ni, S. (2021). Collaborative consumption in China: An empirical investigation of its antecedents and consequences. *Journal of Retailing and Consumer Services*, 62, 102632. https://doi.org/10.1016/j.jretconser.2021.102632
- Nielsen, J. R., Hovmøller, H., Blyth, P. L., & Sovacool, B. K. (2015). Of "white crows" and "cash savers:" A qualitative study of travel behavior and perceptions of ridesharing in Denmark. Transportation Research Part A: Policy and Practice, 78, 113–123. https://doi.org/10.1016/j.tra.2015.04.033
- Olsson, L. E., Huck, J., & Friman, M. (2018). Intention for car use reduction: Applying a stage-based model. *International Journal of Environmental Research and Public Health*, 15(2), 216. https://doi.org/10.3390/ijerph15020216
- Ozanne, L. K., & Ballantine, P. W. (2010). Sharing as a form of anti-consumption? An examination of toy library users. *Journal of Consumer Behaviour*, 9(6), 485–498. https://doi.org/10.1002/cb.334
- Papaoikonomou, E., & Valor, C. (2016). Exploring commitment in peer-to-peer exchanges: The case of timebanks. *Journal of Marketing Management*, 32(13-14), 1333–1358. https://doi.org/10.1080/0267257X.2016.1177578
- Philip, H. E., Ozanne, L. K., & Ballantine, P. W. (2015). Examining temporary disposition and acquisition in peer-to-peer renting. *Journal of Marketing Management*, 31(11-12), 1310–1332. https://doi.org/10.1080/0267257X.2015.1013490
- Rifkin, J. (2000). The age of access: The new culture of hypercapitalism, where all of life is a paidfor experience. J.P. Tarcher/Putnam.
- Ringle, C. M., & Sarstedt, M. (2016). Gain more insight from your PLS-SEM results: The importance-performance map analysis. *Industrial Management & Data Systems*, 116(9), 1865–1886. https://doi.org/10.1108/IMDS-10-2015-0449
- Ringle, C. M., Wende, S., & Becker, J. M. (2022). SmartPLS 4. http://www.smartpls.com
- Roberts, J. J. (2015). As 'sharing economy' fades, these 2 phrases are likely to replace it. *Fortune*. Retrieved June 26, 2021, from https://fortune.com/2015/07/29/sharing-economy-chart
- Roos, D., & Hahn, R. (2017). Understanding collaborative consumption: An extension of the theory of planned behavior with value-based personal norms. *Journal of Business Ethics*, 158(3), 679–697. https://doi.org/10.1007/s10551-017-3675-3
- Sarstedt, M., Hair, J. F., & Ringle, C. M. (2022). "PLS-SEM: Indeed a silver bullet"—retrospective observations and recent advances. *Journal of Marketing Theory and Practice*. https://doi.org/ 10.1080/10696679.2022.2056488
- Scholz, T. (2016). *Platform cooperativism: Challenging the corporate sharing economy*. Rosa Luxemburg Stiftung. Retrieved June 26, 2021, from https://rosalux.org.br/wp-content/uploads/2016/06/scholz\_platformcooperativism\_2016.pdf
- Schor, J. (2016). Debating the sharing economy. *Journal of Self-Governance and Management Economics*, 4(3), 7–22. https://doi.org/10.22381/JSME4320161
- Shmueli, G., Sarstedt, M., Hair, J. F., Cheah, J. H., Ting, H., Vaithilingam, S., & Ringle, C. M. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *European Journal of Marketing*, 53(11), 2322–2347. https://doi.org/10.1108/EJM-02-2019-0189
- Slee, T. (2015). What's yours is mine: Against the sharing economy. OR Books.
- Sukhov, A., Olsson, L. E., & Friman, M. (2022). Necessary and sufficient conditions for attractive public transport: Combined use of PLS-SEM and NCA. *Transportation Research Part A: Policy and Practice*, 158(4), 239–250. https://doi.org/10.1016/j.tra.2022.03.012
- Sundararajan, A. (2016). Sharing economy: The end of employment and the rise of crowd-based capitalism. MIT Press.

Appendix 1. Heterotrait-monotrait (HTMT) ratio.

	01	02	03	04	05	06	07	08
01 Sharing Orientation		0.437-0.747	0.154-0.343	0.217-0.421	0.457-0.690	0.284-0.588	0.150-0.399	0.232-0.491
02 Platform Authenticity	0.590		0.193 - 0.447	0.190 - 0.400	0.417-0.633	0.139-0.402	0.269 - 0.505	0.219-0.476
03 Trend Orientation	0.214	0.305		0.275 - 0.537	0.111-0.336	0.398-0.692	0.160-0.410	0.182-0.415
04 Grassroots Engagement	0.298	0.294	0.404		0.363-0.535	0.391-0.637	0.256-0.460	0.350-0.528
05 Attitude	0.573	0.526	0.215	0.450		0.381-0.604	0.440-0.624	0.534-0.696
06 Norms	0.422	0.266	0.543	0.513	0.494		0.293-0.554	0.501-0.729
07 P. Behav. Control	0.254	0.389	0.274	0.360	0.533	0.421		0.463-0.641
08 Behav. Intention	0.361	0.350	0.290	0.440	0.616	0.617	0.554	

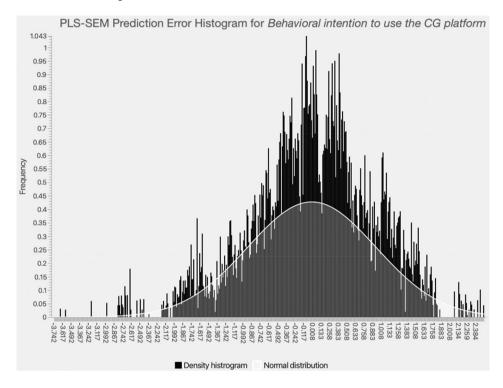
Note: HTMT values are given below the diagonal. Bias-corrected confidence intervals [2.5%–97.5%] are given above the diagonal – estimated using the bootstrapping procedure (10,000 samples).

Appendix 2. Inner variance inflation factor (VIF) values.

	01	02	03	04	05	06	07	08
01 Sharing Orientation					1.308	1.308	1.308	1.447
02 Platform Authenticity					1.465	1.465	1.465	1.747
03 Trend Orientation					1.183	1.183	1.183	1.383
04 Grassroots Engagement					1.197	1.197	1.197	1.469
05 Attitude								1.826
06 Norms								2.163
07 P. Behav. Control								1.456
08 Behav. Intention								

Note: The VIF values, obtained from the PLS algorithm, are all well below the conservative threshold of 3, thus there are no multicollinearity issues to consider.

Appendix 3. Predictive relevance analysis of Behavioural Intention to use CG platform. 3.1. Distribution of prediction error.



#### 3.2. Prediction errors

	Q <sup>2</sup> predict	PLS RMSE	LM RMSE	PLS MAE	LM MAE
I intend to participate in the CG in the future.	0.072	1.284	1.287	0.971	0.975
I will always try to participate in the CG.	0.120	1.472	1.477	1.121	1.134
I plan to participate in the CG as often as I can.	0.120	1.584	1.586	1.243	1.249

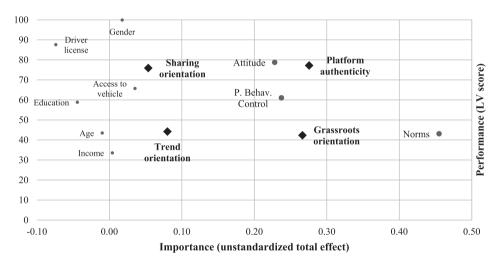
Note: Compared to the linear regression model (LM) scores, PLS-SEM scores yield lower prediction errors in terms of Root Mean Squared Error (RMSE) – and but also the Mean Absolute Error (MAE) considered a more relaxed measure – for all indicators, such as the model can be said to have high predictive power.

#### Appendix 4. Total effects.

	01	02	03	04	05	06	07	08
01 Sharing Orientation					0.072-0.381	0.012-0.355	-0.185-0.157	-0.124-0.210
02 Platform Authenticity					0.158-0.528	-0.184-0.236	0.156-0.557	0.042-0.501
03 Trend Orientation					-0.129-0.078	0.158-0.427	-0.037-0.190	-0.035-0.182
04 Grassroots Engagement					0.115-0.306	0.231-0.506	0.058-0.271	0.161-0.364
05 Attitude	0.238	0.336	-0.022	0.211				0.040-0.406
06 Norms	0.192	0.023	0.301	0.368				0.186-0.767
07 P. Behav. Control	0.000	0.352	0.081	0.165				0.081-0.388
08 Behav. Intention	0.054	0.276	0.080	0.266	0.228	0.455	0.237	

Note: The total effects (given below the diagonal) on *Behavioural intention to use the CG platform*, obtained from the PLS algorithm, are considered medium for *Attitude towards the CG platform* and *Perceived behavioural control of using the CG platform*, and large for *Norms*. Bias-corrected confidence intervals [2.5%–97.5%] are given above the diagonal, obtained using the bootstrapping procedure (10,000 samples).

Appendix 5. Importance-Performance Map Analysis (IPMA) of Behavioural intention to use the CG platform.



Note: Key constructs of interests are depicted by a diamond. Constructs based on the Theory of Planned Behaviour and control variables are depicted by circles (large and small, respectively).