MORE THAN JUST TRAVELING LOW BUDGET – USER EXPERIENCE AND MOTIVATION FOR HOSPITALITY SHARING PLATFORMS

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Abstract

Purpose – The emergence of the sharing economy has redefined travel behavior, giving rise to community-based models of hospitality exchange. Same accounts for the contribution of cycling tourism to the hospitality industry, which continues to grow. Warmshowers.org, an international community-based hospitality platform tailored to touring cyclists, exemplifies this transformation, offering a no-cost platform where long-distance cyclists connect with volunteer hosts. Sharing platforms per se is a broadly investigated field. However, most research focuses on profit-oriented sharing platforms and therefore empirical studies on the success factors of non-profit-oriented sharing platforms remains limited.
Methodology – This paper draws on a large-scale global empirical analysis of the non-profit sharing platform Warmshowers in order to deliver more statistically sound insights into mutual-help sharing platforms. The study investigates the socio-demographic profiles, behaviors, experiences, motivations and patterns of platform usage of participants in the Warmshowers network. A descriptive research design was adopted, implemented through an online questionnaire. A final sample of 9,515 respondents provided data from more than 50 countries.
Findings – Results highlight that the homogeneity of the sharing community plays a fundamental role in the success of non-profit sharing platforms. Findings suggest that the positive impact on mutual-help hospitality experiences are important motivating factors for the use of non-profit sharing platforms. This paper adopts the position that mutual-help sharing platforms provide valued hospitality alternatives, particularly for niche tourism products.
Contribution – This study contributes to ongoing discussions around the dynamics of the SE by emphasizing the importance of user identity and community homogeneity in fostering sustainable, non-commercial exchanges.
Keywords Bicycle tourism; sharing economy; mutual-help platform, motivation, homogeneity; reciprocity

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INTRODUCTION

Technological advancements in digital networks, coupled with the increasing ease of global connectivity, have resulted in the emergence and rapid growth of the sharing economy. Evolving forms of resource identification and their commodification have impacted the behavior of travelers and the means through which the production and consumption of tourism-related services takes place (Cheng, 2016). The hospitality sector is no exception, as the evolution of peer-to-peer transactions via online sharing platforms provides popular alternatives to traditional accommodation options (Bahar, 2024; Bellotti et al., 2015; Farmaki and Miguel, 2022).

Similar to other sectors, disruptions to traditional hospitality economies have emerged through virtual sharing networks along two primary lines. Hospitality exchange for profit, such as Airbnb and Booking and non-profit-oriented a.k.a. mutual-help platforms such as BeWelcome or formerly Couchsurfing (Codagnone et al., 2016; Gössling and Hall, 2019). Alongside these more familiar examples, serving rather niche markets, some platforms aim at leveraging social interaction needs and the rigidity of traditional product-options to both extend destination options and improve tourist experiences (Bellotti et al., 2015; Mancha et al., 2022; Sung et al., 2018).

Large-scale studies on private-to-private (P2P) – mostly non-profit networks – are missing as most studies focus on the analysis of profit-oriented ones (Delgado et al., 2023). What remains of interest, is the exploration of characteristics of these mutual-help accommodations sharing platforms by identifying key reasons and motivations of travelers and hosts to engage in such intense hospitality platforms free of charge (Delgado et al., 2023; Lyu and Fang, 2022; Silva and Silva, 2018). An example of a non-profit-oriented sharing community is Warmshowers (WS).

This research addresses this inconclusive fragmentation through structuring an empirical analysis of WS to answer the following research questions:

- What are characteristics of WS users and their travels?
- What motivates WS users to offer or seek hospitality?
- What are the characteristics of the usage behavior of guests and hosts?
- What does the observed behavior reveal about generalized reciprocity in non-profit sharing platforms?

Therefore, the central research motivation for this paper was to investigate usage patterns, motivations, experiences and the concept of generalized reciprocity in the context of hospitality sharing within niche sectors, in this case the WS platform which caters to hospitality sharing for avid cyclists. We seek to understand what drives individuals to give and receive hospitality.

1. THEORETICAL FRAMEWORK

1.1. Sharing economy and collaborative consumption

At the most basic level, the sharing economy (SE) represents a contemporary form of resource allocation, as more and more individuals are offering what they own for temporary use by others, sharing commodities to maximize the utilization of resources while increasing common social interests (Belk, 2007; Görög, 2018; John, 2013). In times of overconsumption and environmental challenges, interest in new consumption models and sustainability increases, as the examples of Freecycle and Airbnb show (Aptekar, 2016; Bellotti et al., 2015; Guttentag et al., 2018).

The SE (also shared, collaborative, peer or access economy) does not have a single definition (Curtis and Lehner, 2019; Görög, 2018). At their core, most definitions consider the SE new marketplaces which make it possible to exchange goods and services on a peer-to-peer or shared basis and maximize the utilization of resources while increasing social interests (Belk, 2007; EPRS, 2017, 2; Gössling and Hall, 2019; Hamari et al. 2015). As the following research focuses on a the P2P-platform in the tourism and hospitality sector, they can be defined as "space suitable for overnight stays sold or used for free by a provider (the host) to an end-user (the guest) for short-term use through direct or mediated (online) interaction between host and guest" (Sainaghi, 2020, p.1).

Although based on collaborative consumption (Curtis and Lehner, 2019), participating organizations can be differentiated through dimensional relevance (i.e. number of users), interaction modality (i.e. P2P vs. B2C), type of assets being exchanged (i.e. a property vs. one's labour), terms of their current regulatory implications and their potential to disrupt incumbent industries (Codagnone et al., 2016).

Based on these criteria, WS can be classified as a non-profit, P2P, asset-sharing platform that operates on a global scale, focused on community-based, value-driven hospitality. It offers a compelling case for exploring the social dimensions of sharing and alternative forms of tourism.

Research has been conducted regarding economic impacts of those platforms on touristic infrastructure (Hajibaba and Dolnicar, 2017; Martín et al., 2018; Zervas et al., 2017) as well as the life of locals in destinations (Fang et al., 2016; Goodman, 2016, Jordan and Moore, 2018) as well as on the consumer's side (Bae et al., 2016; Guttentag et al., 2018). Though there is literature regarding gifting goods (Aptekar, 2016) or hospitality options for the general public, such as Couchsurfing (Liu et al., 2016), especially for niche, non-profit P2P-platforms, literature is still fragmented. Therefore, research on consumers of niche-platforms as WS can help to understand and optimize consumer experience and retention and the work of providers.

1.2. The concept of reciprocity

The act of giving and taking among two or more individuals is defined as reciprocity. Mavondo and Rodrigo (2001) stated that people feel the obligation to return a favour according to social and anthropological rules of exchange. After Gouldner (1960) it is a humanly feature to meet self-centered wishes. Individuals want to enhance the possibilities of obtaining benefits for themselves in the future (Deckop et al., 2003). Reciprocity demands straight benefits, as it includes the prospect of returns in the future. However, the returns might not match the initial acts (Molm et al., 2007). Hamilton (2002) proposed the theory of two reciprocity patterns. The "two-party reciprocity" occurs between two individuals (peer-to-peer). The reciprocal behavior that subsists between more than two individuals is called generalized reciprocity. Liu et al. (2016) state that within homogenous communities generalized reciprocity is a frequent and common appearance.

1.3. Sharing Economy in hospitality exchange communities

The sharing economy in hospitality exchange communities like Airbnb or WS is represented by the same features. Users register online and create profiles on the website. Profiles include personal information and often other users' recommendations. Members communicate through the platform, book sheltering or offer accommodation to other members around the world (Molz, 2012).

The service of WS was founded in 1993. The community for bicycle tourists gathers more than 180,000 members in over 160 countries, of which approximately 60% are hosts (Warmshowers, n.d.). Hospitality exchange platforms like WS represent the sharing idea as non-profit hospitality networks. Besides the obvious advantage of free accommodation, these platforms allow people, who were once strangers, to form personal connection and share interests as well as activities (Hamari et al., 2015; Kuhzady et al., 2020; Silva and Silva, 2018). According to previous studies, they are motivated by the idea of promoting cultural experience and forming new friendships (Kim et al. 2017; So et al., 2018). Trust and reciprocity are supposed to play major roles in their success (Lauterbach et al., 2009). "Many tourists use digital technology and social media to plan, purchase or review travel experiences. They demand sustainable tourism products as well as more unique and personalized tourism experiences. People are also increasingly open to the idea of sharing resources and to new flexible work opportunities. All these factors have favoured the development of the sharing economy" (EPRS, 2017, 2).

1.4. Bicycle tourism and sharing (C2C tourism)

Cycling is a growing phenomenon not only as urban mobility vehicle for commuting but also for bike-traveling (Han et al., 2017). Cycling Tourism is a highly promising field in the tourism industry. It is a significant economic factor and grows in attractiveness holding advantages for both travelers and destinations (ADFC Bicycle Travel Analysis, 2024). According to Lamont (2009) bicycle tourism can be conceptualized by six parameters: 1. away from home region, 2. single vs. multi-day trips, 3. non-competitive activity, 4. cycling as main purpose, 5. active participation, and 6. form of recreation or leisure. Several current researchers picked-up and applied this definition in their research projects (Han et al., 2017). To propose a technical definition conforming to the notion of tourism incorporating a mandatory overnight stay would change the landscape of research into bicycle tourism. Since the underlying study focuses on bike travelers who stay at least one day overnight at someone else's place away from the home region, a new definition is being generated which is based on Lamont's (2009).

C2C (cyclist-to-cyclist) tourism is defined as private-to-private cycling tourism. C2C tourists use a bicycle (not mainly for sport reasons) to travel from one place to another and stay at least one night at a self-organized private place. It represents a mostly (on a virtual/social media) platform-based self-organized multi-day trip/tour that can happen locally, domestically or even abroad. C2C tourism is marked by three dimensions of sustainability and represents an important and growing type of sustainable tourism.

2. EMPIRICAL STUDY

2.1. Research design and participation

The study employed a descriptive research design to investigate usage patterns and user characteristics within the WS community. The target population consisted of cyclists and cycling tourists registered as members of the WS platform (102,314 members). The questionnaire was pre-tested in five loops with a total of 28 participants.

Data were collected through an online survey via SoSci Survey. The online survey was distributed to the WS community via an email invitation sent by the organization's management board. The survey targeted all registered users on the WS platform and remained open for a total period of four weeks, with a reminder email sent at the two-week mark to encourage participation.

A total of 11,181 responses were received (response rate of 11%), with respondents predominantly from North America and Europe.

The following validation procedure was used to generate an adjusted sample. First, empty or almost empty cases were deleted. About 1,000 participants gave information on their cycling behavior, but never used WS so far and were therefore unable to provide any information about usage motives and behavior. As the focus of this study is on the use of a sharing platform using the example of WS, this data was not included. For this reason, cases where participants never used WS so far and cases where participants used WS only for communication were deleted.

This was followed by a deletion of cases where participants neither hosted a guest (0 times) nor used WS as a guest (0 times). Last step was the deletion of cases, where participants missed to answer either one of the following 4 questions: whether they hosted a guest, how many days they host a guest on the average, used WS as a guest or how many days they stay at a host's place on the average (or one or two answers were 0 and the others were missing). The final sample consists of 9,515 WS users.

2.2. Measures

The questionnaire was applied in English. Most questions were taken from the study published by Liu et al. (2016). These questions covered different sociodemographic aspects to describe the community as well as various aspects of website use.

Several additional questions describing the cycling behavior, motivation for cycling/hosting and the specific WS usage were developed by the authors.

The survey was structured into six thematic sections, each addressing a specific research dimension.

1. **Introduction – Tour Cycling and Hosting**
   This section assessed participants' general cycling and tour-cycling behaviors, their previous use of the WS platform (as guest or host), and included questions on interpersonal trust.
2. **"Warmshowering" (Tour Cycling as a Guest)**
   Focused on the experiences, preferences, and motivations of respondents when using WS while traveling as a guest. Topics included host selection criteria, length of stay, and perceived benefits or drawbacks.
3. **Hosting**
   Investigated the experiences, preferences, and motivations of participants who had hosted cyclists via the platform. Questions explored hosting frequency, acceptance criteria, and attitudes toward guests.

4. **Evaluation of the WS Platform**
   This section gauged user satisfaction with various dimensions of the platform, including community aspects, technical features, and communication tools. It also solicited feedback on potential areas for improvement.
5. **Outlook and Engagement**
   Examined participants' expectations for the platform's future development, including technological enhancements, partnerships, and infrastructure support. Respondents were also asked about their willingness to engage as volunteers.
6. **General Information (Demographics)**
   Collected socio-demographic data such as age, gender, country of residence, education level, employment status, and income, enabling segmentation and comparative analyses.

The complete questionnaire is provided in the appendix.

The following analysis focuses on section 1 – 3, section 4 and 5 are supposed to be analysed in a separate contribution.

The analysis of the survey results was conducted with Microsoft Excel and SPSS. While the primary focus of this report is on descriptive analysis, causal relationships are intended to be explored in subsequent phases of the research.

Answering the questions was not mandatory; participation in each survey item was optional. Consequently, the sample size (n) varies for each question depending on the number of responses received.

2.3. Sociodemographics

The sample consists of 9,515 WS users (adjusted sample). 31% were female, 66% were male, (3% other: non-binary/third gender, preferred to self-describe gender, preferred not to say/ no answer; see Table 1). The WS user base shows a marked predominance of male participants. Additionally, the platform is more frequently used by individual travelers rather than couples. Two distinct age groups are prominent within the community: one comprising guests in their 20s to 30s, and another hosts in their 50s to 60s. Nearly half of the respondents are fully employed, while around 20 % are retired.

With regard to the socioeconomic background, the average reported monthly net income was €4,423 (arithmetic mean), with a median of €2,300 for the total group. One quarter of respondents reported earnings less than 1,500 and one quarter more than 4,000. Regarding the income, 42.5% did not answer the question and as the question was open, incorrect answers, typing errors, and extreme outliers were deleted. The guests tend to be younger and have a lower income than the hosts. Those who use WS for both are in between (see Table 1).

In terms of education, WS participants appear to be highly educated. This may reflect both the demographic composition and the potential for even higher educational attainment among younger users who are still in the process of completing their studies. The participants currently resided in 116 different countries. The majority of users reside in Europe and North America, with North Americans making up a notably large portion (43%). Most came from the United States (34%), France (10%), Canada (9%), Germany (8%), the United Kingdom (6%), Australia (4%), Switzerland (3%), Netherlands (3%), Spain (2%), Belgium (2%), Italy (2%), and New Zealand (2%).

Table 1: **Sociodemographic information on the sample**

Characteristics	**Total** (n = 9,515)	**Guests** (n = 1,309)	**Hosts** (n = 2,906)	**Both** (n = 5,300)
Gender				
Male	66%	68%	63%	67%
Female	31%	29%	35%	30%
Other options	3%	3%	2%	3%
Ages (years)				
< 20	1%	2%	0%	1%
20-30	19%	39%	7%	21%
31-40	22%	25%	17%	24%
41-50	15%	12%	16%	15%
51-60	21%	10%	27%	20%
61-70	18%	10%	25%	16%
≥70	4%	1%	7%	4%
Not specified	1%	1%	2%	1%
Countries of origin				
USA	34%	30%	42%	30%
France	10%	11%	8%	11%
Canada	9%	9%	7%	9%
Germany	8%	9%	6%	9%
United Kingdom	6%	8%	5%	6%
Australia	4%	3%	4%	4%
Netherlands	3%	3%	2%	3%
Switzerland	3%	3%	2%	3%
Belgium	2%	2%	1%	3%
Spain	2%	3%	1%	3%
Italy	2%	2%	2%	2%
New Zealand	2%	1%	3%	2%
Others	15%	16%	17%	15%
Occupation				
Full-time employed	46%	42%	48%	46%
Part-time employed	18%	17%	17%	19%
Homemaker	2%	1%	2%	2%
Retired	20%	12%	26%	19%
Unemployed	6%	15%	3%	6%
None of the above	7%	12%	4%	7%
Not specified	1%	1%	1%	1%
Education				
Still in school	1%	1%	0%	0%
Middle school	1%	1%	1%	1%
High School	7%	8%	8%	6%
Junior college	3%	3%	5%	3%
Completed Apprenticeship	4%	5%	4%	4%
Bachelor's degree	36%	40%	35%	36%
Master's degree	36%	34%	34%	38%
Doctoral degree	8%	5%	9%	8%
Other degree	5%	4%	5%	4%
Net monthly income in €	M = 4,423 (SD = 7,167)	M = 4,147 (SD = 7,384)	M = 5,062 (SD = 7,488)	M = 4,162 (SD = 6,934)
Q1	1,500	1,300	1,687	1,500
Q2	2,300	2,000	2,664	2,200
Q3	4,000	3,286	5,062	3,500

Note. M = arithmetic mean, SD = standard deviation, Q1 = first quartile, Q2 = median/second quartile, Q3 = third quartile. * income converted in Euro (€)

To better describe the WS community and the pattern of use, we differentiate three subgroups in the following analysis: people using the platform only for traveling/as guests ("warmshowering") (14%), people using the platform only as hosts (30%) and people who do both (56%).

2.4. Results

2.4.1. Cycling behavior

The vast majority of participants in the WS study (97%) are active cyclists, with only 3% indicating that they do not currently ride bicycles. Bicycle touring is a common activity within the community, as 90% of respondents reported having undertaken

at least one multi-day bicycle tour involving overnight stays. An additional 9% expressed interest in tour cycling, while only 2% are not interested in tour cycling, and 1% stated they do not ride or own a bicycle. In terms of annual cycling behavior, respondents reported a median of approximately 3,000 km cycled per year, with an arithmetic mean of 4,089 km (SD = 3,773).

Regarding touring practices (see Table 2), the median tour length covers approximately 900 km, while the mean distance is substantially higher at 2,688 km (SD = 6,682). The duration of these tours varies considerably: one quarter of respondents cycle for up to one week, whereas half engages in tours lasting more than one week and up to almost two months. Notably, about one quarter undertakes extended tours lasting more than two months. The middle (median) duration of a bicycle tour is approximately 15 days, although the mean reaches 67 days (SD = 211), indicating a substantial number of long-distance travelers. In terms of expenditure, the median daily budget during a tour is around €30, while the mean is €38 (SD = 33). These figures vary depending on the country of origin and the destination, suggesting differing cost structures and travel habits across regions.

As expected, there are some differences regarding the tour details between the three subgroups. The longest tours (duration as well as length) can be found in the subgroup "guests", followed by those doing traveling and hosting. Especially the third quartile illustrates the differences between the three groups. Hosts report the highest daily budget. This result gives a first indication for the reciprocity behavior within the WS community and even if the subgroup hosts travels less by bicycle than the other two groups, the majority of hosts has at least tour-cycled once.

Table 2: **(Tour) cycling behavior**

Items	**Total** (n = 9,515)	**Guests** (n = 1,309)	**Hosts** (n = 2,906)	**Both** (n = 5,300)
Annual cycling behavior				
Cycling km in total in a year	M = 4,089 (SD = 3,773)	M = 4,684 (SD = 4,341)	M = 3,235 (SD = 3244)	M = 4,282 (SD = 3,764)
Q1	1,500	1,609	1,000	1,609
Q2	3,000	3,219	2,414	3,219
Q3	5,000	6,437	4,365	5,633
Last bicycle tour				
Duration in days	M = 67 (SD = 211)	M = 106 (SD = 275)	M = 23.0 (SD = 80)	M = 74 (SD = 224)
Q1	7	11	4	7
Q2	15	31	7	20
Q3	50	90	15	60
Distance in km	M = 2,688 (SD = 6,682)	M = 4,216 (SD = 10,601)	M = 1,085 (SD = 2,917)	M = 2,937 (SD = 6,354)
Q1	370	600	200	435
Q2	900	1,653	450	1,000
Q3	2500	4,111	1,000	2,800
Daily Budget (in Euro)	M = 38 (SD = 33)	M = 31 (SD = 28)	M = 49 (SD = 39)	M = 36 (SD = 31)
Q1	17	13	20	16
Q2	30	25	40	29
Q3	50	40	64	48

Note. M = arithmetic mean, SD = standard deviation, Q1 = first quartile, Q2 = median/second quartile, Q3 = third quartile.

2.4.2. Warmshowers usage

About half of the WS travelers only uses WS for traveling (guests: 54 %; both: 56 %) and has not used another sharing model yet. A preference for WS is notable for the subgroup hosts where only 30% has already used another sharing platform.

Those traveling with WS (subgroups "guests" and "both") have already used the WS platform 9 times and they stayed two days on average. The subgroup hosts (only hosting) have already hosted 15 times and their guests stayed 2 days on average. The subgroup using WS for both, traveling and hosting, hosted almost 10 times with an average duration of two days (see Table 3).

All three subgroups agree to a large extent to accommodate guests who go on a cycle tour. This applies in particular to the subgroups "hosts" and "both". But the willingness for reciprocity is clearly expressed by those who have so far only been WS travelers.

Table 3: **Warmshowers usage**

Items	**Total** (n = 9,515)	**Guests** (n = 1,309)	**Hosts** (n = 2,906)	**Both** (n = 5,300)
How many times have you used WS for traveling?	--	M = 9 (SD = 14)	--	M = 9 (SD = 17)
Q1		2		2
Q2		4		5
Q3		10		10
How many days do you stay at a host's place (on average)?	--	M = 1 (SD = 1)	--	M = 1 (SD = 2)
Q1		1		1
Q2		1		1
Q3		1		1
How many times have you ever hosted a WS guest?	--	--	M = 15 (SD = 44)	M = 10 (SD = 19)
Q1			3	2
Q2			5	4
Q3			12	10
How many days do you host your guests (on average)?	--	--	M = 2 (SD = 3)	M = 2 (SD = 2)
Q1			1	1
Q2			1	1
Q3			2	2
How likely would you be to host someone who is on a cycle tour?				
Very Likely	75%	52%	79%	79%
Likely	20%	33%	18%	19%
Neutral	3%	10%	2%	2%
Unlikely	1%	4%	0%	0%
Very Unlikely	0%	1%	0%	0%

Note. There were several open-ended questions describing the cycling behavior for instance. For the overall group, no values are given for the questions on the frequency of WS use, as in each case one of the subgroups was unable to provide valid information here due to its role in WS use.

M = arithmetic mean, SD = standard deviation, Q1 = first quartile, Q2 = median/second quartile, Q3 = third quartile.

2.4.3. Platform patterns of use

We asked participants about their motivations and preferences when using the platform (see Table 4). The most important motivations for WS hosts to offer their homes are helping tour cyclists (86%) and sharing their fantastic experiences (68%). WS hosts choose their guests based on various reasons, often based on traveling mode (26%) and other guests' feedback/other hosts' feedback for the guest (24%) However, the most frequent answer was that it doesn't really matter (45%).

The most important motivations for WS travelers are to explore the local culture, to save money, and to make friends. The preferences based on which WS travelers choose their hosts are diverse and not clearly defined. A similar philosophy (29%), and personality (25%) are mentioned most often, but again a large proportion doesn't really care (26%).

Only 7% of WS users keep in touch with most of their guests and 9% with most of their hosts.

Bad experiences are rare. Lots of instances mentioned in the WS survey are based on personal experience. Tour cyclists' bad experiences mainly result from unreliability and missing property on the part of the hosts.

Table 4: **Platform patterns of use**

Items	**Hosts** ("hosts" & "both")	**Items**	**Guests** ("guests" & "both")
Motivation to host		**Motivation to travel/cycle**	
Just to help them	86%	To save money	63%
To make friends	42%	To explore local culture	67%
To share their fantastic experiences	68%	To get reliable information on destinations	46%
To practice languages		To make friends	
To promote the use of bicycles	21%	To travel sustainably	59%
Others	33%	Others	50%
	16%		17%
Main factors to accept a request to hosting (or not)			
Profile picture	13%		
Profile information	43%		
Number of times already hosted	14%		
User rating (feedback)	37%		
Impression when contacted	47%		
None of the above	12%		
Other	26%		
Preferences for guests		**Preferences for host**	
Similar hobbies	10%	Similar hobbies shared with you	18%
Similar values	19%	Similar philosophy shared	29%
Unique experiences	12%	Accommodation	19%
Original countries	8%	Personality	25%
Language	8%	Knowledge of local condition	18%
Traveling mode	26%	I don't really care	26%
Other guests feedback	24%	Other	38%
It doesn't really matter	45%		
Other	14%		
Keep in touch or not (with guests)		**Keep in touch or not (with hosts)**	
Yes, with most		Yes, with most	9%
Yes, some of them	7%	Yes, some of them	39%
No	55%	No	20%
Not specified	31%	Not specified	31%
	7%		
Does hosting cyclists motivate you to tour cycle?			
Yes	65%		
Maybe	20%		
No	12%		
Not specified	3%		
Bad experiences or not (hosting)		**Bad experiences or not (as guest)**	
Yes	11%	Yes	7%
No	83%	No	62%
Not specified	6%	Not specified	30%

Note. Except for the questions about "motivation" and "recommendation," participants could select multiple pieces of information in the other questions; therefore, percentages may add up to more than 100%.
Note. All participants who stated a usage of WS for traveling or for both (traveling and hosting) are identified as „guests", all participants who stated a usage of WS for hosting or for both (traveling and hosting) are identified as „hosts".

3. **DISCUSSION**

3.1. Cycling behavior

The cycling behavior of WS users reinforces the platform's distinct identity within the SE. With over 97% of respondents regularly cycling and nearly 90% identifying as bicycle travelers, the platform clearly attracts a highly specialized user base. The annual cycling distances and the duration of bicycle tours indicate a strong commitment to cycling as a primary form of travel rather than a casual or recreational activity.

Notably, differences in cycling intensity emerge across the three user subgroups. Guests report the longest and most frequent tours, supporting the interpretation that WS is an essential travel tool for long-distance cyclists. Hosts, while still highly engaged with cycling, tend to ride shorter distances and engage less frequently in extended tours. This difference likely reflects their role as stationary supporters of the mobile cycling community. The subgroup engaging in both hosting and traveling exhibits moderate values, reinforcing their hybrid role within the network.

The income as well as the average daily budget of approximately €38 also suggests that WS users, while cost-conscious, are not necessarily driven purely by financial constraints. The modest but non-negligible travel expenses further support the idea that WS users are not simple "budget tourists", only interested in an economic travel option, but rather value-oriented travelers seeking authentic, low-impact alternatives (Bellotti et al., 2015, Lyu and Fang, 2022; Silva and Silva, 2018).

Rather, the platform appears to attract users motivated by values such as sustainability, community connection, and meaningful travel experiences as a substantial proportion of all subgroups in the present study report such motives (see 2.4.3 and 3.3, also reported by Faulks et al., 2008). This aligns with the results by Guttentag et al. (2018), who described different types of Airbnb users, which valued authentic and interactive hospitality and travel experiences. Similar results were identified in the case Couchsurfers, where trust and community were leading factors (Liu et al., 2016) or for the platform Freecycle, where users valued the option to combine sustainable, altruistic and solidary behaviors (Aptekar, 2016).

The identification of user types based on travel length, frequency, and budget opens the possibility for further segmentation of WS participants into meaningful categories such as "long-haul explorers," "local connectors," or "cycling minimalists," depending on their motivations and engagement styles.

3.2. Warmshowers usage

The division into three user subgroups – guests, hosts, and those who engage in both – reveals distinct engagement patterns. Hosts tend to be more established within the platform, having accommodated more guests and doing so for on average slightly longer durations. Guests report longer and more extensive tours, which aligns with the notion that those using WS while traveling rely more intensively on the network for support.

Additionally guests tend to be younger and have a lower income than the hosts. Hosting might be more suitable when family responsibilities are reduced and one might have more space available due to income and living situation. This offers an interesting approach to reciprocal behavior over the life span. Accordingly, the majority of guests (85%) expresses willingness to host in the future (see Table 3), suggesting that reciprocity within the platform is not limited to immediate exchanges but is instead characterized by delayed or generalized reciprocation (Molm et al., 2007). This supports the theory of generalized reciprocity where users are willing to "give back" to the community, even if not to the same individuals from whom they received support (Hamilton, 2002; Liu et al., 2016). The phenomenon could also be observed in the study conducted on Couchsurfers, which illustrated the importance of giving and trust within the community (Liu et al., 2016).

Additionally, a relatively low percentage of WS users have used other sharing platforms, particularly among hosts. This indicates that WS serves a highly specific niche and fosters strong loyalty, possibly due to the shared identity and lifestyle of long-distance cyclists.

3.3. Platform patterns of use

WS hosts are primarily driven by a desire to help fellow cyclists (86%) and to share meaningful travel experiences (68%). These motivations are strongly linked to the cycling identity and lifestyle that defines the platform. As the hosts represent the group with the highest income, they are not dependent on earning money from overnight accommodation.

Guest preferences further underscore the niche appeal of WS. Even though saving money is one of the most frequently mentioned motives for using WS as a guest, the picture is more differentiated. Several motives work in parallel and add important social and ethical aspects to the picture. Just under half to two-thirds of guests use WS to explore local culture, to make friends, to travel sustainably and to get reliable information on destinations. The importance of cost-saving suggests that WS users

still appreciate the practical benefits of free accommodation. According to Kuhzady et al. (2020), this is a well-known effect, particularly over long travel durations. This is notable for the two subgroups travelling with WS usage ("guests" and "both"). Both groups report a lower daily budget as well as a lower income than the WS hosts.

When selecting hosts, WS guests often prioritize shared values and personalities (mentioned by 25-29% of respondents), yet a significant portion of users (26%) indicate no strict preference. This implies a generally open and trust-based attitude towards interaction within the community, reinforcing the idea that the network functions based more on relational dynamics than transactional logic (Kuhzady et al., 2020; Liu et al., 2016). Those results substantiate the results from Liu and coauthors (2016), who found that Couchsurfing users build on mutual trust and pass the hospitality within the community.

Bad experiences on the platform are rare. Most negative incidents reported by WS users stem from unreliability or unmet expectations, such as no-shows or poor communication. However, the majority of users expressed satisfaction with their interactions, and over 96% would recommend the platform.

In sum, WS caters to a more purpose-driven, value-oriented, and lifestyle-specific community (Faulks et al., 2008). Its structure and ethos fosters a unique culture of mutual help and trust within the niche of long-distance cycling tourism.

3.4. Limitations

Despite the empirical evidence found and analysed, there are limitations of our study. About two-thirds of the respondents come from the US and EU. While other global regions are included (e.g., Latin America, Asia), they are underrepresented, which limits cross-cultural generalizability. The study population is highly educated (70% with academic degrees) and relatively affluent compared to the global average, with average incomes well above the poverty line. These are also typical effects in empirical social research. Furthermore, as the survey was conducted in English, users who are not fluent or do not speak English very well probably felt less addressed by the study. As WS itself sent out the invitation to the survey and the survey specifically referred to the future development of the platform, it is possible that very satisfied and very dissatisfied users in particular took part in the study. This extreme response bias could distort the evaluation of the platform, but it is unlikely that this will have an impact on the basic motivation to use the platform, as this should precede registration for the platform.

Additionally, the analysis is primarily descriptive. While some questions point toward possible causal relationships (e.g., hosting motivation and tour cycling behavior), no rigorous causal modelling or regression analysis was included in this version of the report. That is planned for a following publication with an in-depth analysis of the role of trust and reciprocity.

CONCLUSION

Theoretical implications

This study provides rare empirical insights into the functioning of non-profit, peer-to-peer hospitality exchange networks using WS as a case study. By analyzing a large-scale dataset, we were able to identify how motivations and reciprocal behaviors shape user engagement in a niche tourism context.

From a theoretical standpoint, this study contributes to ongoing discussions around the dynamics of the SE by emphasizing the importance of user identity and community homogeneity in fostering sustainable, non-commercial exchanges.

The three user groups (guests, hosts, and those who engage in both) demonstrate varying engagement patterns, but all reflect a strong underlying orientation toward non-commercial reciprocity (Molm et al., 2007). This segmentation reveals how WS supports generalized reciprocity, where acts of hosting are not necessarily reciprocated directly, but rather circulate within a broader network of giving (Hamilton, 2002; Kuhzady et al., 2020; Liu et al., 2016). Those findings support existing research, which considers the aspects of trust, altruism, solidarity and general reciprocity prominent factors on P2P-platforms (Aptekar, 2016; Bellotti et al., 2015; Liu et al., 2016).

Furthermore, the motivations reported by users – ranging from helping others, sharing experiences to explore local cultures and saving money – suggest a complex interplay of altruism, community belonging, and practical concerns. These motivations are not mutually exclusive but interwoven, offering insight into why WS thrives without monetary incentives (Bellotti et al., 2015; Kuhzady et al., 2020; Liu et al., 2016; Lyu and Fang, 2022)

The work contributes to the growing body of literature on the P2P-platforms, focusing on an example in a tourism niche. The results clearly demonstrate that WS is more than a low-budget alternative for accommodation. It fosters a community based on shared values, lifestyle commitment, and mutual generosity. Generalized reciprocity serves as fundamental mechanisms, sustaining platform activity without the need for financial incentives. Users do not simply exchange services, they participate in a network of meaning, support, and cultural experience. Those findings align with research on other P2P-Platforms, such as Couchsurfing as a general hospitality option or Freecycle as a platform for giving goods away (Aptekar, 2016; Liu et al., 2016).

Identifying those aspects can help to understand consumer behavior and offers a foundation for further research to understand potential motivators to choose more sustainable and authentic options.

Practical implications

Practically, the findings create transparent profiles and show common interests in platform design – key elements that may guide the development of other mutual-help platforms beyond the tourism sector.

The empirical findings of this study highlight WS as a distinct and highly specialized case within the broader SE. WS facilitates a form of niche tourism that is grounded in shared identity, lifestyle, and values. The commitment to bicycle tourism unites hosts and guests beyond the practicalities of accommodation, forming the basis of a socially cohesive and trust-based community (Faulks et al., 2008).

The results provide an insight into the profiles of WS users and their motivations for consumption, increasing the transparency for WS as well as other P2P-platform providers. It enables providers to optimize their platform in order to cater to the needs of consumers and hosts and helps to minimize mismatch in consumer and provider motivation, identified by Bellotti et al. (2015). Moreover, this research underlines the significance of user segmentation. Recognizing differences between hosts, guests, and hybrid users allows for a deeper understanding of the platform's social dynamics and the lifecycle of user participation. While guests are often more transient and utility-oriented in their use, hosts exhibit greater social trust and long-term engagement. Lastly, it adds to the existing research body that sustainable practices do not need to be motivated by financial benefits and can arise from intrinsic motivation.

Future research

Future research should expand on these findings by exploring longitudinal user behavior, the role of digital reputation systems in non-monetary contexts, and the potential for similar community-driven models in other travel-related or social service sectors. Besides, the comparison with other hospitality exchange platforms could be interesting, particularly to shed light on differences between non- and profit organizations.

In sum, WS exemplifies how digital infrastructure can enable sustainable, community-based travel through the power of shared identity and reciprocal altruism – offering a meaningful and scalable alternative to profit-driven SE models.

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