

MAARTEN TER HUURNE

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A

An illustration of two children standing on a white horizontal line. On the left, a girl with brown hair in a yellow dress holds up the letter 'G'. On the right, a boy in a red shirt and white pants holds up the letter 'V'. The letters 'E' and 'A' are positioned between them, and the letter 'V' is at the bottom of the stack.

A
LEAP
INTO
FAITH

Determinants of Trust in the Sharing Economy

A LEAP INTO FAITH:

Determinants of Trust in the Sharing Economy

MAARTEN TER HUURNE

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Colophon

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A Leap into Faith: Determinants of Trust in the Sharing Economy

Een sprong in het diepe: determinanten van vertrouwen in de deeleconomie

(met een samenvatting in het Nederlands)

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Voor mijn ouders

TABLE OF CONTENTS

LIST OF TABLES - P.8

LIST OF FIGURES - P.9

1

TO TRUST AND
BEING TRUSTED IN
THE SHARING
ECONOMY - P.10

2

ANTECEDENTS OF
TRUST IN THE SHARING
ECONOMY: A SYSTEMATIC
REVIEW - P.34

3

REPUTATION EFFECTS
IN SOCIALLY DRIVEN
SHARING ECONOMY
TRANSACTIONS - P.58

4

PROMOTING TRUST
THROUGH LINGUISTIC
FEATURES OF PROVIDER
PROFILES IN THE SHARING
ECONOMY - P.80

5

THE INFLUENCE OF
SENSE OF COMMUNITY
AND SOCIAL IDENTIFI-
CATION ON TRUST
IN THE SHARING
ECONOMY - P.104

6

NEDERLANDSE
SAMENVATTING - P.132
REFERENCES - P.145
DANKWOORD - P.161
CURRICULUM VITAE - P.164
LIST OF PUBLICATIONS - P.165

LIST OF TABLES

TABLE 1.1. OVERVIEW OF RESEARCHED TRUST ANTECEDENTS AND TRUST FRAMEWORK PROPERTIES IN THIS DISSERTATION **P.21**

TABLE 2.1. FINAL SEARCH TERM MECHANISMS INFLUENCING TRUST IN THE SHARING ECONOMY AND C2C E-COMMERCE **P.40**

TABLE 2.2. FULL DETAILS OF THE INCLUDED STUDIES **P.42**

TABLE 3.1. DESCRIPTIVE STATISTICS **P.73**

TABLE 3.2. REGRESSION MODELS OF MEAL SUCCESSFULLY SHARED AND MEAL PRICE **P.74**

TABLE 4.1. PERCEIVED TRUSTWORTHINESS ITEMS USED IN THE MAIN STUDY **P.93**

TABLE 4.2. RESPONDENTS DESCRIPTIVE STATISTICS **P.95**

TABLE 4.3. HYPOTHESES AND EXAMPLES OF WORDS IN EACH LIWC CATEGORY **P.96**

TABLE 4.4. DESCRIPTIVE STATISTICS OF LINGUISTIC FEATURES **P.96**

TABLE 4.5. CORRELATION MATRIX FOR LINGUISTIC FEATURES **P.96**

TABLE 4.6. CROSS-CLASSIFIED ANALYSES FOR PERCEIVED TRUSTWORTHINESS WITH LINGUISTIC FEATURES AND RESPONDENT CHARACTERISTICS **P.98**

TABLE 4.7. LINEAR REGRESSION ANALYSIS WITH MEALS SOLD (LOG, DEPENDENT VARIABLE) AND PERCEIVED TRUSTWORTHINESS SCORE (INDEPENDENT VARIABLE) **P.99**

TABLE 5.1. RESULTS OF EXPLORATORY FACTOR ANALYSIS **P.118**

TABLE 5.2. SAMPLE CHARACTERISTICS OF AIRBNB AND SABBATICALHOMES **P.120**

TABLE 5.3. CORRELATIONS AND DESCRIPTIVE STATISTICS OF KEY CONSTRUCTS **P.121**

TABLE 5.4. MULTIPLE REGRESSION ANALYSES FOR EXPLAINING TRUST IN OTHER USERS **P.122**

TABLE 5.5. MULTIPLE REGRESSION ANALYSES FOR EXPLAINING NEED FOR INFORMATION ABOUT OTHER ACTORS **P.122**

LIST OF FIGURES

FIGURE 1.1. THE TRUST FRAMEWORK (RIEGELSBERGER, SASSE, MCCARTHY, ET AL., 2005) P.18

FIGURE 1.2. EXAMPLE BOOKING REQUEST ON AIRBNB P.30

FIGURE 2.1. FLOWCHART OF THE STUDY SELECTION PROCESS P.46

FIGURE 2.2. NUMBER OF STUDIES PUBLISHED PER YEAR P.47

FIGURE 2.3. NUMBER OF STUDIES PER TYPE OF PLATFORM P.47

FIGURE 3.1. THE RESEARCH MODEL P.68

FIGURE 3.2. EXAMPLE OVERVIEW OF MEAL LISTINGS P.70

FIGURE 3.3. SCREENSHOT OF A PROVIDER PROFILE AT SHAREYOURMEAL P.70

FIGURE 4.1. THE RESEARCH MODEL P.91

FIGURE 4.2. SCREENSHOT OF A PROVIDER PROFILE AT SHAREYOURMEAL P.92

FIGURE 5.1. THE RESEARCH MODEL P.114

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TO TRUST AND BEING TRUSTED IN THE SHARING ECONOMY

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INTRODUCTION

My first experience with the sharing economy was in the summer of 2016 when I went on a trip to the Baltics, an unknown destination to me and therefore extra appealing. Because I did not want to arrive without a travel plan, I needed a travel guide to make a preliminary itinerary. One way to acquire a travel guide would be to go to a bookstore and buy one. However, knowing that the Baltics would not be a frequent destination for me, the purchase of a Baltics travel guide felt somewhat like a waste of money. Unfortunately, when I asked around, it turned out that no one in my social network could provide the travel guide I needed. It seemed that the only option available would be to buy one instead. It was then that I learned about Peerby, a sharing platform where people borrow from, and lend to, one another in their own neighbourhood, and I decided to give it a try. I placed a request via Peerby's mobile app, and, after a few hours, *Fenna* replied that I could borrow her Baltics travel guide and pick it up at her place.

Although my problem seemed to be solved, there were some trust issues that needed to be dealt with. First, I had to trust Fenna that the travel guide was still in a useable condition. Also, although not very likely, my safety could be at risk because I was picking up something at a stranger's house. From Fenna's perspective, she had to trust me that I would handle her travel guide with care and return it to her in good order. Likewise, Fenna might have personal safety concerns because she was letting a stranger into her home. A complicating factor in all this was that we could not turn to Peerby if something in the transaction went wrong, because they do not offer any guarantees or legal safeguards to rely on. It became obvious that, for a successful transaction to happen, Fenna and I had to trust each other.

The anecdote shows that the sharing economy has expanded prevailing consumption patterns by enabling consumers to borrow, rent, lend, share, and barter directly with unknown others (Botsman & Rogers, 2010). Many platforms have emerged in the sharing economy that offer a wide array of products and services ranging from transport to pet sitting. One of the most compelling examples of the sharing economy is Airbnb. Since its founding in 2008, more than 200 million guests have used it, about 4 million listings have been offered worldwide, and the company grew to an estimated value of \$31 billion in 2017 (Airbnb, 2017; CNBC, 2017). The rise of Airbnb is exemplary of the rapid pace at which the sharing economy has been growing. Although there are no exact measures of the size of the sharing economy, its potential revenues have been estimated at \$15 billion in 2014, rising to \$335 billion by 2025 (PwC, 2014).

In addition, it is apparent that consuming in the sharing economy entails several risks and that trust is necessary for subsequent behaviour. Considering the

many risks involved, it is remarkable that so many people partake in the sharing economy, certainly compared with more traditional consumption modes where institutional safeguards are more often present. Moreover, trust in others seems to be on the decline over the last decades (Twenge, Campbell, & Carter, 2014).

Given the popularity of the sharing economy, it can be assumed that ways have been found to develop trust between users. However, explanations of this trust are relatively meagre, because the literature on trust in this context is scarce (Hawlitschek, Teubner, Adam et al., 2016) and related streams of literature (e.g. business-to-consumer (B2C) and customer-to-customer (C2C) e-commerce literature) study trust under different conditions of risks and involve different actors. These difficulties make it uncertain whether previously found trust mechanisms are also effective in the sharing economy.

The goal of this dissertation is to contribute to the broader question of why sharing economy users trust each other. To achieve this goal, I adopt Riegelsberger, Sasse, McCarthy, and Human's (2005) trust framework, which analyses trust on the basis of contextual and individual trustee properties. Based on the framework, the overarching research question of this dissertation is: *Through which contextual and individual trustee characteristics does a trustor develop trust in a trustee in the sharing economy?* By answering this question, I contribute to elucidating the unprecedented phenomenon of sharing between strangers on such a large scale. Moreover, insights from this thesis can help platform owners to increase trust between their users. The research question is answered by means of a systematic literature review and three empirical studies that are briefly presented in this chapter.

This chapter is structured as follows. First, issues surrounding the definition of the sharing economy are discussed, after which both the concept of trust in the sharing economy and the trust framework are presented. In the next section, the results of three studies are briefly explained, after which several general conclusions are drawn, as well as implications for theory and practice, limitations, and suggestions for follow-up research in the last section.

WHAT IS THE SHARING ECONOMY?

What exactly is meant by the sharing economy is a subject of discussion, because there are different opinions about what is meant by sharing and about what can be shared. Some adhere to a classical idea of sharing, i.e. non-reciprocal prosocial behaviour (Benkler, 2004). This is in line with authors such as Eckhardt and Bardhi (2015), who argue that making a profit should not fall under the heading of sharing and that sharing should primarily be about creating social

value, whereas, for others (e.g. Botsman & Rogers, 2010), money, and thus profit making, can also be part of the sharing economy. In addition, there is a debate about what can be shared in the sharing economy. Botsman (2013) sees the sharing economy as the exchange of products and services, whereas Frenken, Meelen, Arets, and Van de Glind (2015) limit themselves to just the exchange of physical resources.

To integrate the full scope of the sharing economy, including the different views, in my research, I view the sharing economy as “an economic model based on sharing underutilised assets between peers without the transfer of ownership, ranging from spaces, to skills, to stuff, for monetary or non-monetary benefits via an online mediated platform” (Chapter 2). In addition, to connect with common sharing economy terminology, throughout this chapter buyers are referred to as consumers, sellers as providers, and both buyers and sellers as users (Schor, 2014).

Assessing the Sharing Economy

Attempts to assess the impact of the sharing economy on the economy, society, and the environment conjure up a diffuse and inconsistent image (Frenken, 2016). On a macro-economic level, it can disrupt existing industries and create serious competition for incumbents, whereas on the individual level it provides economic benefits because it creates opportunities to earn additional income. Airbnb, for example, has shaken up the traditional tourism market by permitting individuals to offer accommodation to other individuals (Guttentag, 2015). On the micro-economic level, the sharing economy offers opportunities for individuals to earn an additional income by sharing their assets for money, and, simultaneously, it provides access to cheaper consumption alternatives.

From a societal perspective, the sharing economy is thought to bring people together and stimulate social interaction. However, it can also reinforce existing discrimination effects. Proponents of the sharing economy (e.g. Botsman & Rogers, 2010) have pointed to the possibility of creating social connections between people and enhancing a sense of community through sharing. People meet offline to exchange goods or services, thus creating the opportunity to develop stronger social bonds between them. However, the sharing economy can also reinforce existing biases and consequently stimulate racial discrimination. Edelman and Luca (2014) found that Airbnb black hosts earn approximately 12% less than non-black hosts.

Regarding environmental aspects, one of the obvious positive effects is that the sharing of idle capacity entails consumers buying fewer products and instead utilising unused products of others. For instance, via car sharing, the purchase of a new car can be avoided. Car sharing could result in up to 30 per cent fewer cars and 10 per cent less carbon dioxide (PBL, 2015). However, one could also

argue that cheaper access to products and services increases consumption and thus increases carbon dioxide emissions. A survey among users of taxi platforms Uber and Lyft showed that nearly 54 per cent walked, biked, or used the bus if these platforms were not available (MAPC, 2018). These additional car rides contribute to a city's congestion problem and produce additional polluting emissions, thereby increasing negative environmental effects.

Trust in the Sharing Economy

The sharing economy is gaining popularity among consumers worldwide (European Commission, 2016). This can be illustrated by the number of Chinese participants in the sharing economy, which grew by 100 million in 2015 to 600 million in 2016 (World Economic Forum, 2016). Despite the growing number of people engaging in the sharing economy, there are some barriers to acceptance. Apart from barriers such as unfamiliarity with sharing and higher transaction costs compared with traditional consumption modes, trust is generally recognised as the most important barrier (Corten, 2019; Hawlitschek, Teubner, & Gimpel, 2016). Trust is central to the sharing economy, because people transact with others they do not know, or, as Schor (2014) calls it, *stranger sharing*. Sharing resources with strangers is not new in history; carpooling or hitchhiking, for example, have been around for quite some time. However, sharing was generally confined to a person's own social network. Digital technology, however, has extended the possibility of stranger sharing to virtually everyone (Hamari, Sjöklint, & Ukkonen, 2015).

The need for trust in the sharing economy arises because stranger sharing entails several risks and uncertainties. First, neither the consumer nor the provider can be sure of the true intentions of the other and thus runs personal safety risks when meeting the other in person. Second, a consumer is unsure about a provider's ability to perform certain services (e.g. driving a car, cooking a meal). Also, the fact that the transaction is online makes consumers unable to physically inspect goods upfront, and this creates uncertainty regarding the nature of the product offered. From a provider's perspective, it is uncertain how a consumer will treat his or her property, and whether, and in what state, the property will be returned. Furthermore, apart from the dyadic relationship between a consumer and a provider, trust has shifted to a triadic relationship in which the platform that facilitates the transaction needs to be trusted as well (Möhlmann, 2016). The platform functions as an intermediary and may appear trustworthy or not, for example, because of privacy concerns and website quality (Joinson, Reips, Buchanan, & Schofield, 2010; Yoon & Occeña, 2015). Finally, consumers and providers are both poorly protected by rules and regulations, creating legal grey areas and regulatory uncertainty (Ranchordás, 2015). Trust, therefore, acts as a mechanism that reduces both risk and uncertainty and consequently the need for formal contracts in market exchange (Borgen, 2001).

Trust has been defined in many ways and is treated differently depending on the academic discipline that studies it, making it difficult to compare findings across studies (McKnight & Chervany, 2001). In this dissertation, I apply the widely used definition of interpersonal trust of Mayer, Davis, and Schoorman (1995, p. 715), who define trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party”. To determine whether another party can be trusted, that person’s trustworthiness is assessed based on the beliefs one holds about the other. These beliefs consist of perceptions of the other’s characteristics, i.e. *ability, benevolence, and integrity* (Mayer et al., 1995). In the case of my Baltic trip, I had favourable beliefs about Fenna that she indeed had the requested travel guide (ability), would act honestly towards me (benevolence), and would deliver the travel guide as promised (integrity).

The Trust Framework

To understand how trust develops between two users in the sharing economy, I draw upon Riegelsberger et al.’s (2005) trust framework, see Figure 1.1. This framework describes a basic trust-requiring situation between a trustor (the person who places trust) and a trustee (the person who receives trust). In my research, a first-time encounter between a consumer (trustor) and a provider (trustee) on a sharing platform is such a situation. The framework incorporates two common perspectives on trust, i.e. an economic and a psychological perspective. From an economic perspective, trust is viewed as a rational choice motivated by weighing expected gains against expected losses (Williamson, 1993). On the other hand, from a psychological perspective, trust is conceptualised as a social orientation towards other people and society as a whole (Kramer, 1999). These perspectives are not mutually exclusive however. According to Kramer (1999), a conception of trust is necessary that acknowledges both considerations of calculative processes and the influence of social and relational factors. In this way, the understanding of trust is not limited to the rationality of choice but also leaves room for the role of relational and societal influences on trust behaviour. Thus, in my efforts to study trust in the sharing economy both perspectives are used, because at this point it is unknown which perspective is most suited to explaining trust in the sharing economy.

The trust framework distinguishes contextual and individual properties that influence a trustor’s level of trust. Regarding contextual properties, three types of embeddedness can be discerned: temporal, social, and institutional (see also Raub & Weesie, 2000; Weesie, Buskens, & Raub, 1998). Temporal embeddedness is the possibility that an interaction will be repeated in the future; this provides an incentive for the trustee to behave trustworthily. This effect is also known as *the shadow of the future* (Axelrod, 1984). Social embeddedness is the availability of

information about a trustee's behaviour in a trustor's network. This information is also referred to as *reputation* and can inform a trustor about a trustee's past behaviour, but it is also a way for a trustee to ensure future exchanges. Lastly, transactions nowadays are embedded in a web of institutions, such as organisations (e.g. a sharing platform). Institutional embeddedness can affect a trustee's behaviour by the threat of sanctions (e.g. a sharing platform can expel a user) but can also signal a trustee's trustworthiness when institutions select their members carefully.

In addition to contextual properties, individual properties inherent in a trustee can explain trusting behaviour. Three types of individual properties are identified in the framework, namely, ability, internalised norms, and benevolence, which correspond to the previously mentioned dimensions of trustworthiness. Ability reflects a trustee's capability of performing the behaviour at hand. For instance, an Uber consumer can wonder how good an Uber driver is at driving a car. Next, internalised norms provide trustees with an intrinsic motivation to act trustworthily, even when the rational option would be to act untrustworthily. In my Peerby example, the rational option would be for me to keep the travel guide because Fenna had no possibility of sanctioning me, were it not that my norms prohibited me from doing so. Finally, a trustee can be motivated to act trustworthily by being benevolent towards a trustor and explicitly caring about the outcome for the trustor. In that case, a trustee does not expect to be reciprocated by the trustor immediately or equally. To understand the trustor's behaviour, the trustor's beliefs about these three trustee characteristics are important.

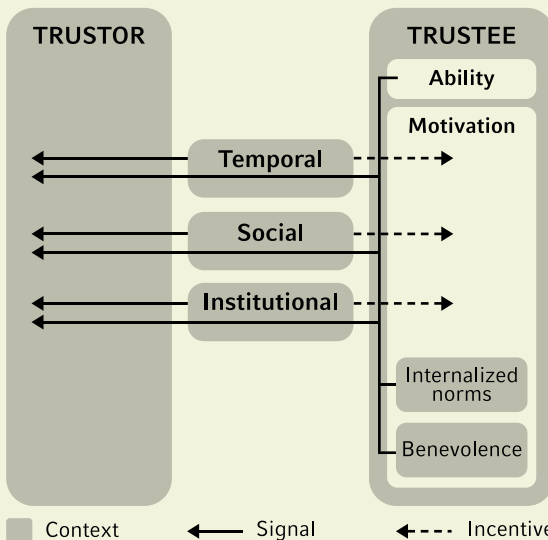


Figure 1.1. The Trust Framework (Riegelsberger et al., 2005).

The framework helps to understand how trust is established by identifying general principles that lead trustors to expect trustworthy behaviour. However, it is unclear how in the sharing economy a trustor's beliefs regarding contextual and individual trustee properties are established, and, consequently, how the framework operates in this context. Therefore, I apply the framework to the sharing economy in the next section.

Application of the Trust Framework to the Sharing Economy

Before empirically testing hypotheses about specific contextual and individual properties, it is important to get an overview of what is already known about antecedents of trust in the sharing economy. To obtain such an overview, Chapter 2 presents a systematic literature review into antecedents of trust in the sharing economy, to answer the following research question: *Which antecedents influence trust in the sharing economy?* From this literature review, three empirical questions were inferred for further investigation.

The first empirical research question relates to the role of social embeddedness in socially driven transactions. Social embeddedness is often operationalised via reputation systems, and it is generally recognised as an important mechanism for creating trust between users in online markets (Resnick, Kuwabara, Zeckhauser, & Friedman, 2000). However, in the sharing economy, markets have arisen where users are not driven primarily by commercial interests but more by intrinsic motivations. An example of such a marketplace is Peerby, where users are intrinsically motivated to share stuff and trust each other without the presence of a reputation system (Van de Glind, 2013). In these types of socially driven markets, a provider could be expected to be trustworthy based solely on his/her intrinsic motivations; this consequently could reduce the importance of a provider's reputation. This leads to the question of whether reputation can be substituted by favourable beliefs about a provider's individual properties as a means to trust (Chapter 3). The chapter taps into reputation literature on online markets in which the economic perspective on trust is dominant.

Secondly, providers' online profile plays an important role in conveying individual trustee properties and in reducing information asymmetry for consumers. Consumers can use a provider's online profile to weed out lower quality providers from higher quality providers using various signals (e.g. a profile photo, reputation, and self-description). According to signalling theory (Spence, 1973), originated in the field of economics, signals are perceived as reliable when they are costly to produce and the costs make cheating, or false signalling, difficult. From a provider's perspective, a self-description is an important marketing tool because it allows for straightforward and unfiltered self-promotion. However, a provider's self-description is a rather cheap signal, because it is easy to lie in a text and simple to adapt it at any point in time. This makes it questionable whether a

consumer would use a self-description to determine a provider's trustworthiness, and, if so, the language use through which individual trustee properties are perceived. Surprisingly, unlike other profile signals, the extent to which a self-description contributes to the trustworthiness of a provider has not yet been investigated. Chapter 4 therefore examines the question of how a provider's perceived trustworthiness is influenced by language use in a self-description.

Finally, sharing with others was previously limited to pre-existing social ties, but the sharing economy has increased the scope of sharing to other networks. This increased scope of sharing has created a community of users who are connected via a sharing platform. It is known from traditional communities, such as neighbourhoods or sports clubs, that a sense of community can create trust between community members (McMillan & Chavis, 1986). When a community is valued positively by its members, the community can serve as a brand for trustworthiness. In that case, personal trust is bolstered by institutional trust. For instance, the Couchsurfing community may give its users the feeling that they have a social support network and friends around the globe (Rosen, Lafontaine, & Hendrickson, 2011). So, when transacting with a Couchsurfing user, one could trust him or her solely based on his or her membership of the Couchsurfing community (i.e. being institutionally embedded). However, unlike traditional communities where interactions proceed via face-to-face contact and people have the opportunity to meet each other in specific places (e.g. bars, sports clubs), this is different for sharing platforms. On sharing platforms, computer-mediated interactions lack the richness of face-to-face communication, and encounters are limited because there are no central places for people to meet. These aspects could hinder the formation of a sense of community and consequently trust between members. Yet, it is unknown what the level of sense of community is on sharing platforms, and to what extent it actually influences trust in other users. Therefore, Chapter 5 investigates the question of the level of sense of community on sharing platforms and to what extent sense of community influences trust in other community members. This chapter leans on the psychological perspective on trust.

Table 1.1 provides an overview of trust antecedents researched in this dissertation as motivated by Chapter 2, linked to the contextual and individual properties distinguished in the trust framework.

Table 1.1. Overview of Researched Trust Antecedents and Trust Framework Properties in this Dissertation

Trust antecedent	Results	Relevant	Chapter
Reputation	Reputation is a relevant signal for trustors, including in socially driven exchanges. It provides incentives for a trustee to act trustworthily and serves as an additional trust signal, next to a trustee's individual properties.	Temporal and social embeddedness	Chapter 3
Linguistic features	Language use in self-descriptions influences trustworthiness perceptions, based on linguistic features related to a trustee's individual properties.	Ability, internalised norms, and benevolence	Chapter 4
Sense of community	A sense of community and a strong group identity influence trust in other users, because underlying social norms make users' actions more reliable and predictable to others.	Institutional embeddedness	Chapter 5

RESULTS OF THE STUDIES

The results of the four studies are briefly discussed in this section.¹ The complete studies can be found in the respective chapters.

Study 1: Which Antecedents Influence Trust in the Sharing Economy?

Chapter 2 systematically reviews the antecedents that influence trust in C2C e-commerce in general and the sharing economy in particular. A systematic literature review brings together all the research regarding a specific subject and subsequently creates a current state of affairs, a process through which possible knowledge gaps can be uncovered to guide future research. So far, systematic literature reviews on trust in e-commerce have been scarce (for rare examples, see Beatty, Reay, Dick, & Miller, 2011; Beldad, Jong, & Steehouder, 2010), certainly when one considers the specific C2C and sharing economy context.

To perform the systematic literature review, we adopted the Prisma protocol (Moher, Liberati, Tetzlaff, Altman, & Group, 2009), which ensures a rigorous and transparent way of reviewing the literature. In total, 1,190 publications

¹ The various studies in this dissertation are written as standalone essays, which have been either published or submitted to international scientific journals. Because this dissertation was written over a four-year period and my knowledge increased accordingly, this may mean that there are some slight inconsistencies between chapters. Because of the modular set-up of the thesis, some overlap between chapters can also not be avoided.

were identified, of which a final set of 45 studies were included in a qualitative synthesis. The final set was categorised according to McKnight and Chervany's (2001) well-established trust typology (i.e. disposition to trust, institution-based trust, trusting beliefs, trusting intentions, and trust-related behaviours). This categorisation sheds light on the type of trust that has been studied and provides a useful framework for the synthesis of the results.

The results of the synthesis show that institution-based trust is affected by third-party recognition, perceived website quality, and trust in the platform. Most of the identified studies investigated trusting beliefs, which we subdivided into trusting beliefs regarding the seller, the buyer, the platform, and the community in order to obtain a more fine-grained understanding of this concept. Various antecedents appeared to influence trusting beliefs, such as a provider's reputation, a consumer's perceived risk, and the interaction experience between the consumer and the provider. Lastly, we found that a provider's profile picture and characteristics influence trusting behaviours.

The results indicate that research into trust in the sharing economy is very scarce, i.e. only nine studies were found specifically relating to the sharing economy. Given the rapid growth of the sharing economy, insights into the development of trust in this specific context are needed. In that light, we conclude that much of the research has been devoted to the effect of reputation on trust; this indicates that it is an important trust mechanism. However, it has been studied only in markets where trustees are primarily motivated to maximise their profits, giving cause to wonder what the effect of reputation would be in markets where trustees could be trusted solely on their virtue. Furthermore, the literature review yielded several directions for future research, such as the exploration of trust in marketplaces with virtuous trustees, addressing the provider's perspective on trust, and using behavioural data to be able to observe actual trusting behaviour. Finally, McKnight and Chervany's (2001) trust typology proved to be useful for comparing and categorising the various trust definitions across studies. It is therefore an addition to the trust framework, which uses a single definition of trust, i.e. "trust as an attitude of positive expectation that one's vulnerabilities will not be exploited" (Riegelsberger et al., 2005, p. 386) and makes no distinction between different types of trust.

Study 2: Does Reputation Affect Trust in Socially Driven Sharing Economy Transactions?

Chapter 3 investigates the effect of reputation on trust in a marketplace with mainly virtuous providers. These are providers who are assumed to act out of benevolence and care for the common good (Achrol & Gundlach, 1999) and could therefore be trusted on the basis of their prosocial motivation. Based on

transaction data from Shareyourmeal (SYM),² trust was measured by means of successful transactions (i.e. whether a meal was successfully shared or not) and meal price. Reputation was measured by the number of thank you notes that a provider received from consumers at the end of a transaction.

We hypothesised and found that a provider's reputation is positively associated with both sales and meal price, meaning that an increase in reputation increases the probability of sharing a meal and the price of a meal. Also, we confirmed the hypothesis that the effect of reputation on the probability of sharing a meal decreases when additional information (i.e. a profile picture and a profile description) is present.

The findings in this chapter confirm that reputation increases trust between actors. Moreover, the findings contribute to the understanding of reputation by showing not only that it has an effect in economically driven exchanges, but also that it affects trust in the context of socially driven exchanges. In addition, evidence for the existence of an *information effect* was found, showing that the effect of reputation is conditional on the amount of profile information already present. More specifically, the effect of reputation on the probability of sharing a meal decreases when a profile contains information, such as a profile picture and a self-description, and increases when this information is absent.

Study 3: How Do Linguistic Features Affect a Provider's Perceived Trustworthiness?

To gain more insight into how a self-description influences trust, Chapter 4 investigates the influence of linguistic features of a provider's self-description on his or her perceived trustworthiness. More specifically, we tested whether specific linguistic features relating to trustworthiness dimensions influence a provider's perceived trustworthiness. In doing so, this chapter adds to the understanding of language use in peer-to-peer (P2P) transactions. Lastly, we explored whether perceived trustworthiness scores are associated with actual sales to test whether it also affects a provider's performance.

To attain the stated research objectives, SYM consumers were asked to rate the trustworthiness of SYM providers based on their profile descriptions. Linguistic features were theoretically linked to the trustworthiness dimensions ability, benevolence, and integrity. The linguistic features were analysed with the text analysis programme LIWC (Tausczik & Pennebaker, 2010). We found that linguistic features in self-descriptions indeed influence a providers' perceived trustworthiness. More specifically, we found that language use relating to information richness, ability, benevolence, and integrity reduces a consumer's

² Shareyourmeal is a Dutch food sharing platform, see www.thuisafgehaald.nl

uncertainty and contributes to a provider's perceived trustworthiness. Also, a provider's perceived trustworthiness score was positively associated with his or her actual sharing performance. These findings illustrate that a self-description is an important means of developing trust towards a provider. Moreover, a well-developed self-description can contribute to actual sharing performance.

Study 4: Does a Sense of Community Influence Trust?

This study contributes to the sharing economy and community literature in three ways. First, the level of sense of community on two different sharing platforms is researched to grasp the extent to which users experience sense of community within a sharing community. Second, we examined the extent to which sense of community influences trust in other users of the platform. In both offline and virtual communities, it has been found that sense of community can contribute to mutual trust between people (Blanchard, Welbourne, & Boughton, 2011; McMillan, 1996). Sharing communities can be considered as a hybrid type of community with both offline and virtual aspects. Building on previous findings, we expected that, in sharing communities also, sense of community could influence trust between users. Lastly, we explored whether there is a difference between consumers and providers regarding their level of sense of community, to take into account the different roles that people can have on sharing platforms.

Users of two sharing platforms were surveyed, i.e. Airbnb and SabbaticalHomes, which both provide for accommodation sharing but are expected to differ in the relation that users have both with each other and with the platform. SabbaticalHomes is directed mainly at people with an academic background, whereas Airbnb attracts a more general audience. The questionnaire measured the following constructs: sense of community, social identification with other users and the platform, the need for information from others, and trust in other users. The analyses controlled for demographic variables, platform experience, trust in the platform, and disposition to trust.

First, we show that SabbaticalHomes users have a significantly higher sense of community than Airbnb users. This indicates that sharing platforms with more homogeneous users have a higher sense of community than platforms with more heterogeneous users. Moreover, a significant difference in sense of community was found between hosts and guests across platforms, meaning that hosts experience a higher level of sense of community than guests. Lastly, support was found for the hypothesis that sense of community indeed has a positive influence on trust in other users. This finding is consonant with research on other types of communities, indicating that sharing communities do not deviate from them in this regard.

GENERAL DISCUSSION

Main Conclusions

Trust has been recognised as one of the most important factors for successful transactions in the sharing economy. However, to date it is largely unknown why so many people seem to trust strangers with whom they share their assets and services. Therefore, this dissertation set out to gain insight into the contextual and individual trustee properties that contribute to the development of trust between users in the sharing economy. To this end, this dissertation aimed to answer the following research question: *Through which contextual and individual trustee properties does a trustor develop trust in a trustee in the sharing economy?* It is important to answer this research question because it offers insights into the unprecedented phenomenon of sharing between strangers on such a large scale. Furthermore, insight into this question could benefit platform owners in their efforts to enhance trust between their users. In this section, I discuss the main conclusions of this dissertation; more detailed conclusions are discussed in the specific chapters. Returning to my anecdote at the beginning of this chapter, we can now understand better why I would trust Fenna, and, conversely, why she would trust me. As can be inferred from the findings of the different studies, both contextual and individual properties have their ways to stimulate trust in the sharing economy. Contextual properties of the exchange can offer incentives for Fenna to act trustworthily (e.g. she could care about her reputation), and her Peerby membership may provide her with credibility. In addition, I needed information about Fenna's individual properties in order to assess the kind of person with whom I was dealing. Furthermore, I needed information to establish Fenna's identity in order for me to know that I was dealing with the person with whom I thought I was dealing. To go into more detail, I will address the trust-warranting properties that were researched in this dissertation and discuss how these properties affect trust in the sharing economy.

First, it appears that reputation is a strong trust signal that is used in both economically and socially driven exchanges. This indicates that we still need and value others' opinions rather than relying solely on our own judgement of the individual properties of the other. Moreover, reputation seems such a powerful signal that, even when the context creates beliefs that users are likely to be trusted on their virtues, people do not forego on the information sent out by reputation. However, practice shows that platforms with a social character (e.g. Peerby) can function without the use of a reputation system, for example, through the local embeddedness of transactions (Corten, Völker, & Mollenhorst, 2018). Nonetheless, Chapter 3 shows that, even in transactions where money has a minor role, reputation is of influence for successful transactions. A possible explanation could be that the more commercial a transaction becomes, the more a trustee is perceived as driven by profit and not by prosocial motivations,

and, consequently, the opinion of others (and thus reputation) matters. Money could create an increased risk, causing a trustor to be less willing to trust the trustee solely on his or her individual properties, thus increasing the need for the opinion of others and/or the opportunity to sanction. To test this assumption, future research could investigate whether reputation has an effect on trust also in sharing platforms where money does not play a role at all.

Chapter 3 showed that the importance of social embeddedness for trust decreases when information about individual properties increases. In this chapter, I investigated the interplay between reputation (social embeddedness) and profile information (individual properties). It became apparent that the effect of reputation on trust is contingent on the amount of profile information already present in a user's profile. This points to the fact that, when more information about a trustee's individual properties becomes available, the importance of temporal and social embeddedness decreases.

Next, the findings in Chapter 4 show that language use can be effective in building trust, although this is an easy-to-fake signal. A provider can use a self-description to convey his or her individual properties through specific linguistic features. This demonstrates that consumers use all available signals present on a provider's profile page, easy-to-fake or not, to assess someone's trustworthiness. It is therefore important that providers become aware of the influence that the various profile elements can have on their trustworthiness and put effort into managing all the different trust signals.

When users feel a sense of community with others on a platform, this can result in general trust in those platform users (Chapter 5). When someone has positive trusting beliefs towards a certain group, group membership can become an indicator of his or her trustworthiness. For example, a member of Couchsurfing might trust other Couchsurfing members solely because he or she has trust in the Couchsurfing community as a whole. Thus, being institutionally embedded can entail the transfer of trust from trust in an organisation to trust in individual group members. Or to put it differently: a trustworthy sharing platform can serve as a brand whose positive trust image reflects on users of that sharing platform.

In addition, I found that the level of sense of community and its effect on trust differ between sharing platforms. Sharing platforms with which users can identify have a higher sense of community, and this also affects trust in other users, compared with sharing platforms where identification is lower. This could be explained by the fact that identification is easier for users who are more similar to each other, also known as the *homophily effect* (i.e. people tend to associate and form bonds with others who are similar to them (McPherson, Smith-Lovin, & Cook, 2001)). Furthermore, providers experience a higher sense of community

than consumers; this could be caused by a difference in commitment to the platform between providers and consumers. Providers are likely to be more committed to the platform because they are more dependent on it for their income.

Chapter 5 demonstrates that an increase in affect-based trust (i.e. sense of community and social identification) does not lead to a decrease in calculus-based trust. This indicates that users in the sharing economy seem to follow two independent trust-building processes, where one is based on a rational foundation and the other on a relational foundation (Yang, Lee, Lee, & Koo, 2018). According to Yang et al. (2018), people first build their trust on rational and cognitive information and confirm whether to trust or distrust through emotional connections. Although I did not study the sequence of these trust foundations, my research provides evidence that trust in the sharing economy can be promoted via more rational and more emotionally driven antecedents.

In summary, trust in the sharing economy can be understood from both an economic and a psychological perspective. The economic perspective studies trust from a calculus and rational view, which entails actors being trusted based on incentives and sanctions that encourage them to live up to the exchange (Williamson, 1975). The psychological perspective, on the other hand, looks at how people think, feel, and form attitudes of trust that possibly influence trust in others. I found that both perspectives on trust offer explanations as to why users trust each other in the sharing economy and that trust cannot be characterised merely as a calculative process, nor is it just an issue of good faith. Thus, both perspectives are needed in our understanding of trust in the sharing economy; this corresponds to Adam Smith's ideas posited in his famous books *The Wealth of Nations* (1776) and *The Theory of Moral Sentiments* (1822). According to Smith, people can be trusted based both on their self-interest (*The Wealth of Nations*) and on their virtues (*The Theory of Moral Sentiments*). These perspectives are thus in no way contradictory but, rather, complementary.

Limitations of this Research

This dissertation encountered some limitations that should be addressed in future research. First, the generalisability of the results is subject to certain constraints. This dissertation examined a selection of sharing platforms, which of course are just a fraction of the sharing economy as a whole. Nonetheless, the selected case studies represent different areas of the sharing economy. SYM is a clear example of a platform that facilitates socially driven exchanges, whereas on the other hand Airbnb is an example of a platform that facilitates economically driven exchanges. Additionally, SabbaticalHomes is a platform aimed at a distinct target group who identify strongly with the platform. Examination of multiple platforms means that trust has been studied in this dissertation in different exchange settings and under different conditions. This

ensures that it is possible to get a more fine-grained view of how trust operates in the sharing economy. All in all, the findings and claims of this dissertation are not intended to generalise from “sample to the universe” (Yin, 2012, p. 12); rather, the findings build theoretical proof that functions as a tool to make assertions about situations similar to the ones studied (Yin, 2012).

Furthermore, this dissertation investigated a specific set of antecedents that are supposed to develop trust between users. However, as Chapter 2 shows, there are many more antecedents in play that are likely to develop trust in the sharing economy, and for that reason more research has to be done. An example would be to investigate whether reputation built on one sharing platform can be transferred to another platform. The antecedents examined in this research were derived from observed knowledge gaps in the literature and from the role that they play in the sharing economy, thereby ensuring their relevance.

Across different studies, I used multiple research methods (e.g. transaction data, a rating task, and survey data) and analysed these data using regression techniques that measured associations between the independent and the dependent variables. As a consequence, it is not possible to establish causality between these two types of variables. For example, in Chapter 5, I assumed a causal relationship between sense of community and trust in other users. However, the opposite could also be true, i.e. a sense of community could be the outcome of trust between users (Jason, Stevens, & Light, 2016). To determine causality, a controlled experiment could be conducted that manipulates sense of community (e.g. by increasing perceptions of belonging) and measures the effect on trust in other users. Nonetheless, the hypotheses formulated in this dissertation were derived from causal theories and often significant relationships were found. This indicates that the assumed relationships between variables are legitimate, i.e. the results are at least consistent with the causal theories assumed. To strengthen the results obtained, the research questions could also be tested with competing theories to see whether this would lead to different results.

Next, this dissertation studied signals that create trust, but not whether this trust is also well-placed. It could very well be that trust placed in others is unjustified, because a trustee might misuse this trust for personal gain and therefore mislead the trustor. The question of when trust leads to misuse is an important one and should be addressed in future research.

Finally, in this dissertation data were gathered from sharing economy users, and their reaction to trust signals was measured. How they perceive and interpret trust signals could be restricted to this particular group of users because they are used to trusting strangers on online platforms. It is unclear whether the results found would also be applicable to other contexts and user populations,

because, for example, risks can differ between markets. Future research could, therefore, test the obtained results in other contexts and with non-users of the sharing economy in order to explore the applicability and possible limits of the trust mechanisms found.

Implications for Theory

This dissertation contributes to existing theory on trusting strangers, because this phenomenon is investigated in a novel context, i.e. the sharing economy, and from multiple perspectives. It is known that trust between strangers progresses more easily when institutional trust is present, e.g. via contracts, safeguards, and regulations (Zucker, 1986). However, the sharing economy context sets new requirements for trust development, and institutional trust is often absent. The research presented in this dissertation shows that trust between strangers is possible without or with limited institutional trust, and it contributes to the trust literature by investigating how different trust-warranting properties influence trust between strangers.

The findings of the different chapters show that, in the sharing economy, easy-to-fake signals can create trust between strangers, although, according to signalling theory, those signals are expected to be ineffective in producing trust. This is a notable finding because, in an exchange setting where institutional trust is in the background and interactions are often one-off, risks become higher. Thus, one would think that users would largely ignore cheap signals and prefer costly signals instead. Nonetheless, the demonstrated effectiveness of cheap signals shows that these signals provide incentives for the trustee that contribute to his or her trustworthiness. For example, it could be that cheap signals are perceived as reliable because they end up being costly after being used in an untrustworthy manner (Schniter & Sheremeta, 2014). A trustee might suffer the consequences in the form of a lower reputation or exclusion from future transactions. Thus, the ex-post costs become greater than the ex-ante benefits.

Furthermore, sharing platforms could be considered as a new type of community in an age where it is often speculated that individualisation is increasing and community building is decreasing (Duyvendak, 2004). Although this claim is questionable, the emergence of sharing communities fits in a larger trend of *decollectivisation* (Duyvendak, 2004). Decollectivisation is a term that describes a reduced grip of nearby relations, shorter and more non-committal relations, and less relevance of social categories for individual views and behaviour. In light of this trend, communities still develop but the nature of communities changes (Wellman, 1979). Duyvendak (2004) observes the emergence of *light communities*, which are characterised by fleeting relationships between members, an increase in the number of relationships, and ease of joining and exiting the community. Sharing communities can be seen as light communities,

because relationships between members are often not in-depth, it is easy to connect with many different people, and it is simple to exit or join the platform. It is notable to see that such communities can also arise around the exchange of products and services, although the level of sense of community seems to depend on the level of social identification with the platform (Chapter 5). Hence, sharing communities are an additional way for people to form light communities and provide fertile ground to see whether processes and outcomes observed in known communities also exist in these types of communities.

Practical Implications

From a practical point of view, this dissertation has multiple implications. It must first of all be said that the task for platforms is not only about increasing trust between users, but also about increasing well-placed trust. After all, it could be possible to set up a platform in such a way that a consumer places trust in providers who do not deserve it. Although this can never be completely prevented, it is important to understand the mechanisms behind trust instead of just implementing certain trust signals. Furthermore, platform owners should monitor the trustworthiness of their users to keep track of possible misuses of their platform. Although more detailed implications are discussed in the individual chapters, some general issues are discussed in this section.

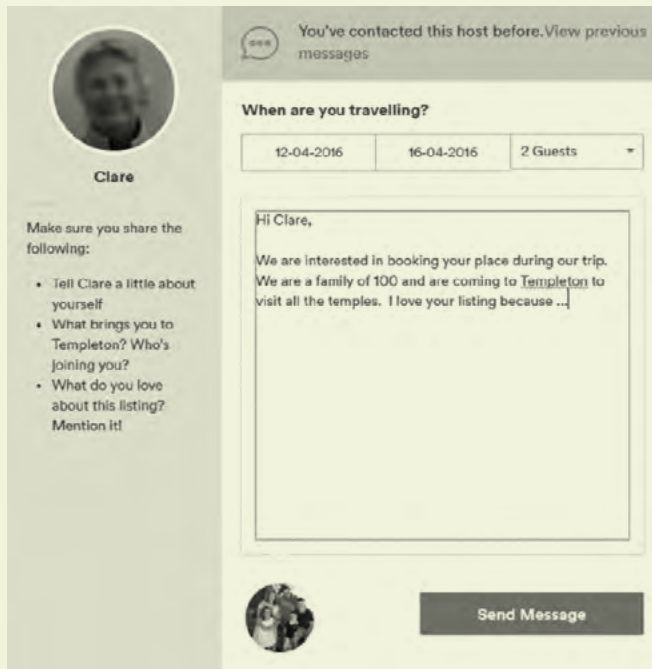


Figure 1.2. Example Booking Request on Airbnb.

First, platform owners could actively design their platform to incorporate trust by recognising that users need information to assess someone's individual properties. This could be done by stimulating users to provide sufficient information about themselves. If a user does not provide any or too little information about him or herself, the platform could actively remind the user to do so. An example of how to stimulate a user to provide enough information is shown in Figure 1.2. This example shows how a user is prompted to share information about his or her booking request on Airbnb. The same goes for other information signals such as a profile picture or a product description. Of course, users in the sharing economy could learn in the same way from these findings and might see an opportunity to adapt their profile if needed.

Second, platforms are advised to invest in the sense of community on their platform. It has been demonstrated that a sense of community can stimulate trust between community members. Although this dissertation did not investigate how a sense of community can be increased, it does show the importance of the community in the development of trust. One possible way to enhance a sense of community is by linking offline meetings to digital activities (Koh, Kim, Butler, & Bock, 2007). Couchsurfing already puts this into practice by organising offline events for its users, and Airbnb connects hosts and guests via so-called Airbnb meetups. However, organising offline interactions is often not feasible because of geographical distances. Thus, creating online interactions between users through multimedia tools (e.g. online video chat) might offer a solution.

Third, the importance of a good self-presentation is crucial for a user's performance in the sharing economy, because an online profile is an important means to develop trust. This implies that users in the sharing economy need to possess skills related to personal marketing. This might pose a challenge for users who do not possess these skills and are subsequently excluded from participating in the sharing economy. Thus, to include those groups who lack personal marketing skills, it is important to provide them with tools or guidance on how to present themselves in the sharing economy. This could, for example, be done by actively giving users feedback on their online profile or by providing step-by-step guidance when an online profile is being set up.

Future Research

The different chapters of this dissertation focus on specific trust-warranting properties and how these influence trust. However, in the process of identifying variables that influence trust between users, the interplay between the different properties should not be forgotten because it could change existing effects. An example of such an interplay is the information effect found in Chapter 3. However, many more combinations of contextual and individual properties can be made. For instance, one could investigate the effect of visual identification

(insight into individual properties) under varying levels of reputation (insight into contextual properties) (Riegelsberger et al., 2005). By investigating how the trust-warranting properties work together, more information is obtained on how the trust framework operates in the sharing economy.

Trust research in the sharing economy has identified various antecedents that influence trust in other users. However, it is unclear how an increase in a specific antecedent leads to an increase in trust, especially in relation to other trust antecedents. It would therefore be insightful to develop a *currency table* of trust, which explains how much, for example, reputation is needed (i.e. the exchange rate) for one unit of trust. Besides giving an overview of trust antecedents, as presented in Chapter 2, this would bring the effects of the different antecedents together.

Additionally, the effectiveness of cheap talk regarding trust creates opportunities for opportunists to misuse these types of trust signals. This could affect the exchange rate of a trust antecedent in the previously suggested currency table. For example, an opportunist could purposely overstate his or her ability to provide a service in his or her self-description and consequently mislead potential consumers. The effect of a self-description on trust would therefore decrease. For this reason, future research should consider the effectiveness of cheap signals on trust when the number of opportunists on a platform increases. One possible way to investigate this is via a *mimic-beset trust game*, which is a trust game mediated by signs and where an opportunist is present (Bacharach & Gambetta, 2001).

Finally, it is recommended that an explicit survey of providers' trust in consumers be carried out. This study has placed particular emphasis on the provider, a trustee, whereas in two-sided markets the consumer also acts as a trustee.

To sum up, by studying trust-warranting properties and their accompanying trust signals, this dissertation has provided new insights into why users in the sharing economy trust each other. Furthermore, theoretical and practical implications were given as well as directions for future research. By doing so, a tip of the veil has been lifted on the question of why users trust each other in the sharing economy.

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ANTECEDENTS OF TRUST IN THE SHARING ECONOMY: A SYSTEMATIC REVIEW

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ABSTRACT

Users and potential users of the sharing economy need to place a considerable amount of trust in both the person and the platform with which they are dealing. The consequences of transaction partners' opportunism may be severe, for example damage to goods or endangered personal safety. Trust is, therefore, a key factor in overcoming uncertainty and mitigating risk. However, there is no thorough overview of how trust is developed in this context. To understand how the trust of users in the sharing economy is influenced, we performed a systematic literature review. After screening, 45 articles were included in a qualitative synthesis in which the results were grouped according to a well-established trust typology. The results show various antecedents of trust in the sharing economy (e.g. reputation, trust in the platform, and interaction experience) related to multiple entities (i.e. seller, buyer, platform, interpersonal, and transaction). Trust in this economy is often reduced to the use of reputation systems alone. However, our study suggests that trust is much more complex than that and extends beyond reputation. Furthermore, our review clearly shows that research on trust in the sharing economy is still scarce and thus more research is needed to understand how trust is established in this context. Our review is the first that brings together antecedents of trust in online peer-to-peer transactions and integrates these findings within an existing framework. Additionally, the study suggests directions for future research in order to advance the understanding of trust in the sharing economy.

INTRODUCTION

Consumption has changed rapidly since the rise of the sharing economy (Botsman & Rogers, 2010). Organisations such as Airbnb and Couchsurfing have popularised the act of consuming directly from peers mediated through an online platform. Nonetheless, the sharing economy is confronted with several challenges that can influence its sustainability. Pressing issues are consumer protection, working conditions, and fair competition (Malhotra & Van Alstyne, 2014). For instance, several industries, such as the hotel and taxi industries, have objected to the difference in regulatory canvas (e.g. taxation) between their structure and that of the sharing economy. Above all, facilitating trust among strangers is a key challenge for all types of sharing platforms, because providers of goods and services are exposed to potential user opportunism (Horton & Zeckhauser, 2016). A lack of trust can therefore lead to insurmountable barriers inhibiting transactions (Buskens, 2002). Arrow (1974, p. 23) describes trust justly as “an efficient lubricant to social exchange”, as it is an efficient way to lower transaction costs (Williamson, 1993). Hence, trust has been repeatedly identified as the most important driver of the long-term success of customer-to-customer (C2C) platforms (Cook & State, 2015; Strader & Ramaswami, 2002).

Trust is important in situations of risk, uncertainty, and interdependence (McKnight & Chervany, 2001). These three elements are very prominent in the sharing economy. Think of, for example, Airbnb hosts who can experience severe damage to their properties or theft of personal belongings (Devine, 2014). These concerns raise difficult consumer protection issues because the sharing economy does not fall neatly into traditional legal categories (Katz, 2015); the result is legal grey areas and regulatory uncertainty (Ranchordás, 2015). This can cause a lack of trust in participating in the sharing economy (Hawlitschek, Teubner, Adam, et al., 2016) and might erode future transactions.

We consider the sharing economy as a special case of C2C e-commerce, because transactions take place between peers, are mediated via the Internet, and many of the trust issues present in C2C are similar to those in the sharing economy. For instance, transaction partners are unable to inspect and evaluate goods upfront, there is little opportunity for interpersonal interaction, and a lack of rules and regulations exist (McKnight & Chervany, 2001; Yoon & Occeña, 2015). Because of these similarities in transactions and trust issues, we build on the field of C2C e-commerce in our study to get a better understanding of trust in online peer-to-peer interactions including the sharing economy. Moreover, research on trust antecedents in the sharing economy seems to be scarce (Cheng, 2016). We will reflect on similarities and dissimilarities in antecedents of trust for C2C-e-commerce in general versus the sharing economy in particular in the discussion section.

Thus, although there is a significant body of knowledge on online trust more generally (Mansour, Kooli, & Utama, 2014), and the issue of trust in the sharing economy more specifically has recently attracted a lot of attention, a systematic review of research on the emergence of trust in this context is currently lacking. Therefore, the current study addresses the research question: *Which antecedents influence trust in transactions in the sharing economy?* Our research objectives are threefold: (1) to assemble antecedents that influence trust in online peer-to-peer transactions, (2) to identify gaps in the sharing economy trust literature, and (3) to sketch paths for future research on trust within the sharing economy. To fulfil these objectives, we systematically searched and collated the literature to summarise the findings on antecedents that influence trust in the sharing economy and in C2C e-commerce.

BACKGROUND

The sharing of resources is as old as mankind, although for a long time it was restricted to small social circles such as family, friends, and relatives (Belk, 2014). The Internet has brought about many new alternatives to traditional sharing (e.g. file sharing, music sharing) and facilitate old ones (e.g. thoughts, images) (Belk, 2014; Hamari et al., 2015). Mobile technology in particular has contributed to the use of sharing options (Botsman & Rogers, 2010). Online peer-to-peer marketplaces have emerged that enable the sharing of underutilized resources such as accommodation, tools, and rides among strangers (e.g. via platforms such as Airbnb, Peerby, and Blablacar).

The realm of the sharing economy encompasses many types of platforms that mainly differ from one another in the mode of consumption. For instance, the taxi platform Uber reflects a traditional market situation wherein consumers pay for a service, and the nature of the relationship between peers is not particularly important. The hospitality platform Couchsurfing, on the other hand, aims at forming new relations between travellers where no monetary exchange is required. These differences can cause inconsistencies in research on the sharing economy and therefore need to be taken into account (Habibi, Kim, & Laroche, 2016).

There is little consensus on the definition of the sharing economy (see for an overview of possible terms referring to the sharing economy Dredge & Gyimóthy, 2015). One reason is that the act of sharing is interpreted differently (Bucher, Fieseler, & Lutz, 2016). Belk (2007, p. 127) adheres to a broad definition by defining sharing as “the act and process of distributing what is ours to others for their use”. To clarify the concept of sharing, Belk (2010) uses the prototypes of mothering and pooling within the family, but many peer-to-peer platforms do not fall into this strict conception of sharing, because these prototypes

assume that sharing is done without reciprocity and that shared resources are joint possessions. However, renting an apartment through Airbnb, for instance, requires the transfer of money and guests may not take great care of the apartment. Conversely, Botsman and Rogers (2010) include many different activities in their interpretation of the act of sharing, namely, bartering, traditional sharing, lending, trading, gifting, and swapping. Given these different interpretations, sharing can be seen as an umbrella term for peer-to-peer exchange without transfer of ownership.

Taking this into account, and building upon Botsman (2013), we define the sharing economy, as *an economic model based on sharing underutilised assets between peers without the transfer of ownership, ranging from spaces, to skills, to stuff, for monetary or non-monetary benefits via an online mediated platform*, thereby encompassing all the different kind of activities that take place on the various sharing platforms. Moreover, this definition stresses the fact that sharing in the sharing economy revolves around peers who use an online platform to exchange both products and services.

Trust in the Sharing Economy

Trust has been widely studied across various disciplines such as anthropology, psychology, social psychology, and sociology (Beldad et al., 2010). As a research object, trust is conceptualised and defined in many different ways across these academic disciplines (see Hawlitschek, Teubner and Weinhardt (2016) for a conceptualisation of trust in the sharing economy). We define trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer et al., 1995, p. 715). According to Mayer et al., this definition of trust is applicable to a relationship with another identifiable party who is perceived to act and react with volition towards the trustor. This kind of relationship resembles the transaction situation in the sharing economy, wherein both parties are showing some kind of vulnerability to the other party and hold a certain expectation about the behaviour of the other party.

To understand trust in an e-commerce environment, McKnight and Chervany (2001) developed a trust typology for e-commerce that integrates the trust views of multiple academic disciplines, thereby making the concept of trust more fine-grained. In their typology, they distinguish *disposition to trust*, *institution-based trust*, *trusting beliefs*, *trusting intentions*, and *trust-related behaviours*. These concepts provide a useful overview of how trust is examined across studies, because they serve as a tool to classify the different ways in which trust has been measured.

METHOD

In our study, we applied the Prisma protocol for systematic literature review (Moher et al., 2009). Although initially created for research in the field of healthcare, it is also used in disciplines such as marketing and clinical psychology (e.g. W. D. Evans et al., 2014; Klettke, Hallford, & Mellor, 2014), because it provides a clear guideline for the reviewing process. The protocol has four stages: identification, screening, eligibility, and inclusion.

To identify relevant studies (stage 1), in August and September 2016 we conducted our search in Google Scholar, Scopus, Web of Science, and ScienceDirect.³ These sources cover much of the existing sociological and psychological research and thus provide a comprehensive view of the current body of knowledge. For completeness, the snowball method was used to complement our literature search with key publications.

The electronic search strategy was designed using blocks of keywords (Ronteltap, Fischer, & Tobi, 2011). Two blocks of keywords were derived from the research question, representing the dependent variable and the context of the study (see Table 2.1). The lack of a shared definition of the sharing economy (Botsman, 2013) impedes an unambiguous description of the specific context of the study. Consequently, a plethora of terms and definitions seem to describe the same phenomenon (e.g. sharing economy, collaborative consumption, collaborative economy, peer-to-peer consumption, access economy). We included the most popular terms for referring to the sharing of resources in peer-to-peer transactions (see Cheng, 2016).

Table 2.1. Final Search Term Mechanisms Influencing Trust in the Sharing Economy and C2C E-commerce

Block	Search term entered in topic field
Dependent variable	'trust' OR 'trustworthiness'* AND
Study context	'sharing economy' OR 'collaborative consumption' OR 'p2p economy' OR 'peer-to-peer economy' OR 'consumer-to-consumer e-commerce' OR 'C2C e-commerce'

** For the search on Google Scholar, the search term 'trust AND trustworthiness' was used to keep the number of results below 1,000. Google Scholar does not show additional results above 1,000. This search term is narrower, leading to more useful results.*

To exclude papers irrelevant to our research question, we formulated exclusion criteria for use in the screening and eligibility stage of the reviewing process.

³ For the search on Google Scholar, citations were excluded.

Articles were excluded if they were not published in a peer-reviewed journal or submitted as a conference paper in the pursuit of reliable, high-quality studies, or if they were written in a language other than English. Also, because we expected that the number of studies in the sharing economy was limited, we included the more general field of C2C e-commerce. To focus solely on the context of the sharing economy and C2C e-commerce, studies in the domain of B2C e-commerce were excluded. Furthermore, studies that did not investigate the antecedents of trust were discarded, because they do not contribute to explaining the emergence of trust. Also, studies that did not present any empirical results (e.g. those that only proposed a research model) were not taken into account. Because our interest is specifically on empirical research that studies antecedents of trust, we excluded articles in the field of informatics, computer science, and law, which are typically not empirical.

The paper selection process (stage 2) started by screening the identified studies' titles and abstracts using the exclusion criteria. Secondly, candidate studies were assessed (stage 3) for inclusion in the systematic review by reading the full text and applying the exclusion criteria again. Finally, the studies selected for review were coded based on our research aims.⁴ The main topics in the coding scheme were:

- Identification (e.g. author, year)
- Research method(s) (e.g. survey, interview, experiment, content analysis)
- Type of trust based on (McKnight & Chervany, 2001) trust typology
- Independent variables
- Outcome.⁵

To synthesise the research findings (stage 4), we adopted a qualitative approach. Qualitative synthesis is a methodology whereby research findings are pooled and conclusions are drawn upon the collective meanings of the research (Bearman & Dawson, 2013). As this study's research context is highly multidisciplinary, trust is conceptualised in different ways, different research methods are used, and contexts vary strongly. Consequently, qualitative synthesis rather than meta-analysis is most appropriate for integrating our findings.

To create an overview in the many antecedents involved in generating trust, we grouped and labelled the antecedents we found. Sometimes an antecedent was found multiple times, because it was studied in relation to different trust typologies. Next, the different antecedents were linked to the entities involved in creating trust (i.e. the seller, the buyer, the interaction between actors, and the transaction characteristics).

⁴ The final coding scheme is available on request from the author.

⁵ The outcomes were fully written down and are incorporated in the results section.

A visual summary of the selection process is displayed in Figure 2.1. Table 2.2 shows the full details of the included studies.

Table 2.2. Full Details of the Included Studies

Author	Research method(s)	Type of trust based on McKnight and Chervany's trust typology (2001)
Abramova et al. (2015)	experiment	Trusting beliefs towards the seller
Alfina et al. (2014)	survey	Trusting beliefs towards the seller
Ba & Pavlou (2002)	online experiment	Trusting beliefs towards the seller
Bente et al. (2012)	online trust game	Trust-related behaviours, trusting beliefs towards the seller
Bente et al. (2014)	online trust game	Trust-related behaviours
J. Chen et al. (2009)	survey	Trusting beliefs towards the platform, trusting beliefs towards the community
X. Chen et al. (2014)	survey	Trusting beliefs towards the seller
D. Chen et al. (2014)	survey	Trusting beliefs towards the platform, trusting beliefs towards the seller
X. Chen et al. (2015)	survey	Trusting beliefs towards the seller
D. Chen, Lou, & Van Slyke (2015)	survey	Trusting beliefs towards the seller
Chiu et al. (2010)	survey	Trusting beliefs towards the community
Ert et al. (2016)	experiment	Trust-related behaviour
Ertz (2015)	conceptual	Trusting beliefs towards the seller
Gregg & Walczak (2010)	survey	Trusting beliefs towards the seller
Greiner & Wang (2010)	transaction data	Trust-related behaviour
Ha & Liu (2010)	survey	Institution-based trust
Jones & Leonard (2008)	survey	Institution-based trust
Jones & Leonard (2014)	survey	Trusting beliefs towards the seller
Kamal & Chen (2016)	survey, interviews	Trusting beliefs towards the seller
Kang et al. (2016)	survey	Trusting beliefs towards the platform
Kwahk et al. (2012)	survey	Trusting beliefs towards the seller
H. G. Lee & Lee (2004)	survey	Trusting beliefs towards the platform, trust towards the seller
Li et al. (2016)	survey	Trusting beliefs towards the seller
Liu et al. (2016)	interview, survey	Trusting beliefs towards the seller
Y. Lu et al. (2010)	survey	Trusting beliefs towards the platform, trusting beliefs towards the seller
J. Lu et al. (2012)	survey	Trusting beliefs towards the platform
Malinen & Ojala (2013)	survey, interview	Trusting beliefs towards the seller
Mittendorf (2016)	survey	Trusting beliefs towards the buyer
Möhlmann (2016)	survey, experiment	Trusting beliefs towards the platform, trusting beliefs towards the seller
Pavlou & Dimoka (2006)	content analysis	Trusting beliefs towards the seller

Table to be continued on the next page

Independent variables	Study performed in the field of C2C e-commerce (0) or the sharing economy (1)
Response strategies of the seller	1
Cognitive trust (ability, benevolence, integrity), eWOM information adoption	0
Feedback profile	0
Reputation scores, seller photos	0
Reputation scores, seller photos	0
Information interaction, emotional interaction	0
Trust in platform, gender	0
Familiarity, service quality, safety, social capital, information quality	0
Trust in platform, gender	0
Perceived information quality, perceived social capital, perceived risk	0
Bidding justice	0
Visual based trustworthiness, attractiveness of the hosts, reputation	1
Online feedback mechanisms, ratings or posts	0
Website quality (information quality, web design)	0
Economic status, social capital, listing quality	0
Third-party recognition, perceived website quality	0
Natural propensity to trust, perceived website quality, others' trust of buyer/seller, third-party recognition	0
Perceived website quality, third-party recognition, fear of seller opportunism, information asymmetry	0
System assurance, background screening, perceived reputation	1
Project related (network externality, perceived informativeness), platform related (perceived accreditation, structural assurance, third-party seal), fundraiser related (value congruence, social interaction ties)	0
Use of instant messenger, customer satisfaction	0
Propensity to trust, institutional characteristics, perceived reputation, perceived size, perceived benefit	0
Praise feedback behaviour (deliberatively praise feedback, casual praise feedback, true compliment feedback)	0
NA	1
Familiarity, perceived similarity, structural assurances, trust propensity	0
Optimism, innovation, insecurity, discomfort	0
NA	0
Familiarity, disposition to trust	1
Trust building measures	1
Outstanding benevolence comments, abysmal benevolence comments, outstanding credibility comments, abysmal credibility comments	0

Table 2.2. *continued*

Author	Research method(s)	Type of trust based on McKnight and Chervany's trust typology (2001)
Pavlou & Gefen (2004)	survey	Trusting beliefs towards the seller
San-Martín & Camarero (2014)	survey	Trusting beliefs towards the platform
Schlaegel (2015)	literature review	Trusting beliefs towards the platform, trusting beliefs towards the seller, trusting intentions towards the seller, trusting intentions towards the platform
Strader & Ramaswami (2002)	survey	Trusting beliefs towards the seller
Sutanonpaiboon & Abuhamdieh (2008)	survey	Trusting beliefs towards the seller, trusting beliefs towards the buyer
Teubner et al. (2015)	experiment	Trusting beliefs towards the seller
Teubner & Hawlitschek (2016)	conceptual	Trusting beliefs towards the platform, trusting beliefs towards the seller, trusting beliefs towards the buyer
Thierer et al. (2015)	conceptual	Trusting beliefs towards the seller, trusting beliefs towards the buyer
Utz et al. (2009)	experiment	Trusting beliefs towards the seller
Verhagen et al. (2006)	survey	Trusting beliefs towards the seller
R. Wang et al. (2012)	survey	Trusting beliefs towards the platform
P. Wang et al. (2015)	survey	Trusting beliefs towards the seller
Wei et al. (2014)	survey	Institution-based trust
Yoon & Occeña (2015)	survey	Institution-based trust
Zhang et al. (2014)	survey	Trusting beliefs towards the platform, trusting beliefs towards the seller

Independent variables	Study performed in the field of C2C e-commerce (0) or the sharing economy (1)
Buyer-driven certification, auction house escrow, credit card guarantee	0
Service quality, guarantee, privacy and security policies, website design, perceived risk	0
Trust propensity	0
NA	0
Propensity to trust, perceived online transaction risk, trust due to prior experience, name recognition, direct interactions, long-time forum members, knowledge and experience, buyer/seller expertise, trust in online information, trust in particular online community	0
Perceived social presence	1
NA	1
NA	1
Severity of the incident, type of trust violation, dispositional trust	0
Intermediary trust	0
Perceived security, perceived reputation	0
Reputation, perceived information integrity, perceived information asymmetry	0
Trust in market maker (trust in platform)	0
Natural propensity to trust, perceived website quality, others' trust of buyer/seller, third party recognition	0
Knowledge based (familiarity), institution based (service quality, security protection), cognition based (social capital, perceived risk, information quality)	0

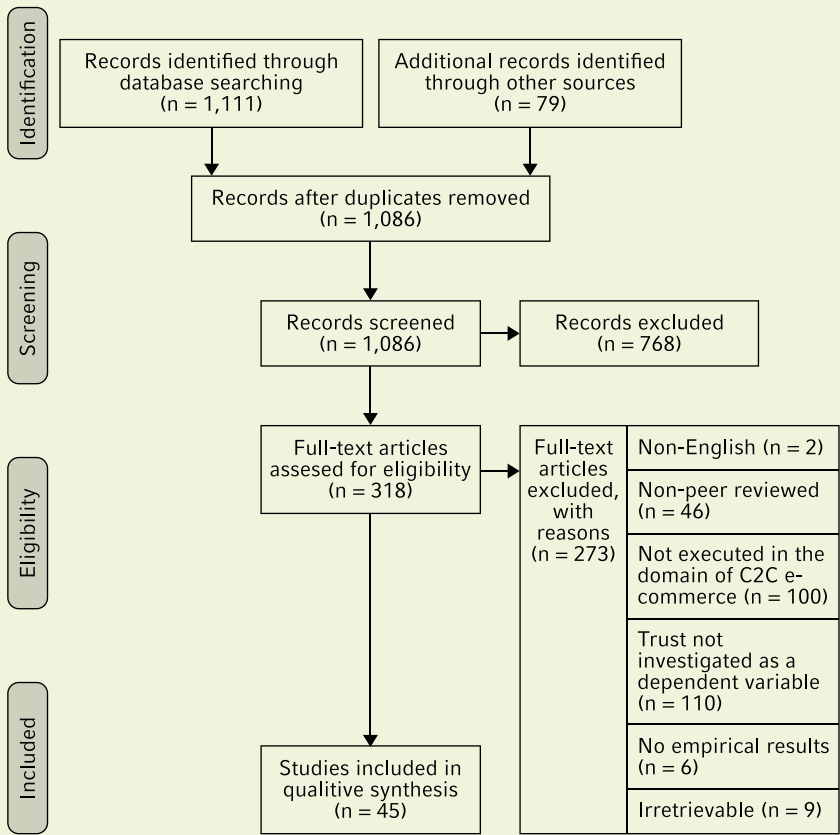


Figure 2.1. Flowchart of the Study Selection Process.

RESULTS

In total, 1,190 studies were identified using the search strategy. Of those, 104 were found to be duplicates, leaving 1,086 studies for screening. When the exclusion criteria were applied to the studies' title and abstract, 768 were excluded, resulting in 318 papers for full-text analysis. An additional 273 studies were excluded on assessment of the full-text version of the studies, resulting in a final set of 45 studies for qualitative synthesis.⁶ The exclusion of so many articles results from the fact that we used a broad search strategy to make sure that no relevant studies were excluded. Most of the articles, however, were not executed in the domain of C2C e-commerce (n = 100) and trust was not measured as a dependent variable (n = 110).

⁶ Because the number of studies dedicated to the sharing economy is very limited, we decided to include 3 working papers. Although these papers do not meet the criterion of being peer-reviewed, we believe that the quality is satisfactory.

Description of the final set

In the final set of studies, the publication years ranged from 2002 (2) to 2016 (8) (see Figure 2.2). Most studies were published from 2014 onwards, with a peak in 2015 (9). Out of all the studies, only nine specifically studied the sharing economy; 36 were performed in the context of C2C e-commerce.

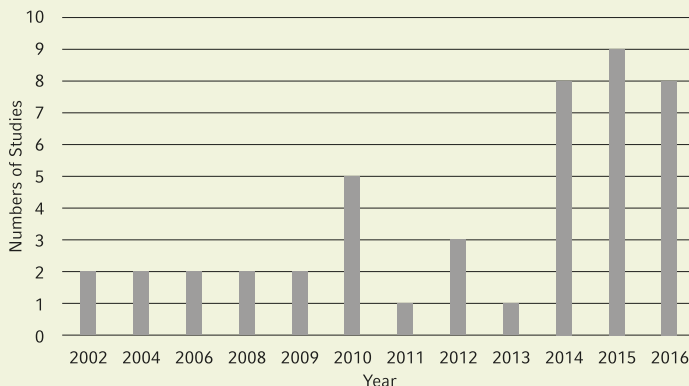


Figure 2.2. Number of Studies Published per Year.

A wide variety of platforms were researched, ranging from Taobao (7) and Airbnb (4) to the Finnish platform Huuto (1) (see Figure 2.3). Not every study was performed taking a particular platform as the research object; in those cases, a more general context was used, for example, online auction marketplaces (6), C2C e-commerce (6), and the sharing economy (2). For six studies, no e-commerce context was specified, for example in the case of online experiments or conceptual studies.

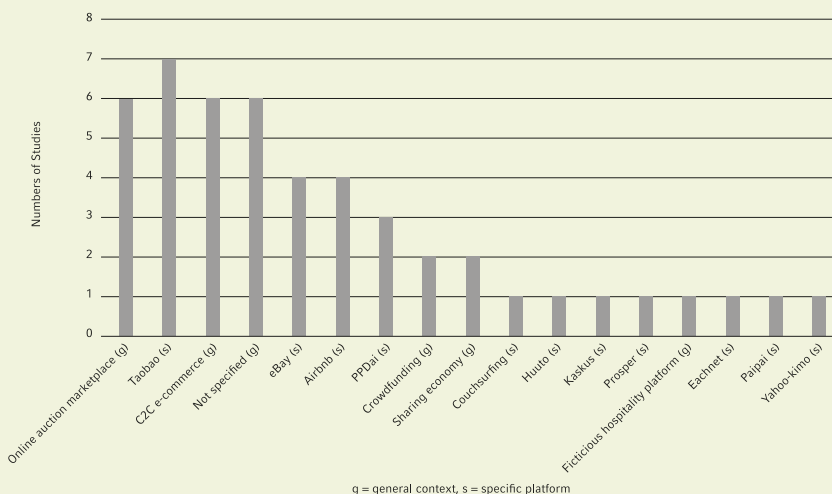


Figure 2.3. Number of Studies per Type of Platform.

When the distribution of McKnight and Chervany's (2001) trust typology was analysed across studies, the object of trust appeared to differ systematically. Therefore, in our analysis, the concept of trusting beliefs is broken down in trusting beliefs towards the seller, the buyer, the platform, and the community. Trusting beliefs towards the seller were most often researched (31), followed by trusting beliefs towards the platform (12), institution-based trust (4), trust-related behaviour (4), trusting beliefs towards the buyer (4), trusting beliefs towards the community (2), trusting intentions towards the seller (1), and trusting intentions towards the platform (1).

Most studies used a survey (32) as their research method. Other methods were experiments (8), conceptual study (3), interviews (3), content analysis (1), literature review (1), and transaction data (1). In relation to the trustor role (i.e. the actor that trusts an entity), the buyer was used as the trustor in most cases (43), in six cases the seller, and in one case it was unclear.

In our analysis, three types of trust were found as the dependent variable: institution-based trust, trusting beliefs, and trust-related behaviours. The results of the synthesis are discussed per type of trust.

Institution-based trust

Four studies investigated institution-based trust. Institution-based trust was operationalised as *trust in C2C e-commerce* by three studies, and one study defined it as *trust in the Internet in general*. Three studies found that *recognition of a platform by a third-party* positively influences institution-based trust (Ha & Liu, 2010; Leonard & Jones, 2010; Yoon & Occeña, 2015). *Perceived website quality* was found to have a positive influence on institution-based trust by three studies (Ha & Liu, 2010; Leonard & Jones, 2010; Yoon & Occeña, 2015), although Yoon and Occeña only found this effect for people in their twenties. Finally, one study found that *trust in the platform* has a positive effect on trust in the Internet (Wei et al., 2014).

In sum, third-party recognition, perceived website quality, and trust in the platform are important drivers of institution-based trust.

Trusting beliefs

The different mechanisms influencing trusting beliefs are discussed per trust object.

Trusting beliefs towards the seller

Twelve studies found that *the reputation of a seller* influences a buyer's trust towards a seller. This relatively large number confirms the importance of reputation. Five studies found that reputation affects a buyer's trusting beliefs

(Bente et al., 2012; Ert et al., 2016; Strader & Ramaswami, 2002; P. Wang et al., 2015; R. Wang et al., 2012). To assess the seller's reputation in online C2C marketplaces, one of the most important tools are *reputation systems* (Y. Liu et al., 2016; Malinen & Ojala, 2013). Examples of reputation systems are feedback mechanisms, ratings, and referrals. Eight studies identified a positive impact of *reputation indicators* such as reputation scores, ratings, and textual reviews (Ba & Pavlou, 2002; Bente et al., 2014; Ertz, 2015; Li et al., 2016; Malinen & Ojala, 2013; Pavlou & Dimoka, 2006; Teubner & Hawlitschek, 2016; Thierer et al., 2015). For example, a survey among eBay users found that positive ratings of sellers lead to higher trust levels. Also, Ertz (2015) proposes that the relation between reputation indicators and online trust between peers is moderated by self-construal (e.g. the extent to which the self is defined independently of others (Cross, Hardin, & Swing, 2011)).

Four studies measured the impact of *reputational feedback* on a buyer's trusting beliefs. Ba and Pavlou (2002) found that negative ratings have a stronger impact on trust than positive ones. According to Abramova et al. (2015), this appears only to be the case if the subject of criticism is controllable by the seller. Also, negative feedback in text reviews on a seller's benevolence or credibility negatively influence a buyer's trust (Pavlou & Dimoka, 2006). Additionally, when a buyer provides feedback that is deliberately positive (i.e. despite a negative experience), it negatively influences their future trust towards sellers, in contrast to when the feedback is sincerely positive (Li et al., 2016).

Three studies found a positive effect of the *interaction experience* between buyers and sellers on trust (Kamal & Chen, 2016; Pavlou & Dimoka, 2006; Sutanonpaiboon & Abuhamdieh, 2008). The use of online video chatting prior to a transaction, for instance, was indicated by respondents as a measure that would increase their trust (Kamal & Chen, 2016). *Familiarity* was identified as having a positive influence on trust by four studies. Familiarity can be divided into familiarity with the seller (Y. Lu et al., 2010; Malinen & Ojala, 2013; Strader & Ramaswami, 2002) and with the platform (Pavlou & Dimoka, 2006). The influence of familiarity may be explained by the concept of perceived similarity (Y. Lu et al., 2010), also referred to as homophily. It points to the mechanism whereby trust is based on common characteristics between the trustor and the trustee.

Six studies investigated the effect of *perceived information quality* on trust. Chen et al. (2014, p. 245) define information quality as "the perception of the accuracy and completeness of the information provided". Perceived information quality was found to have a positive influence on trust (D. Chen et al., 2014; X. Chen et al., 2015; Zhang et al., 2014). When buyers experience information asymmetry, a situation wherein a seller possesses more information, this leads to lower levels of trust (Jones & Leonard, 2014; P. Wang et al., 2015). Next, the *information on the*

forums of C2C platforms is an important source of information and contributes to buyers' trust building (Alfina et al., 2014).

In total, six studies reported factors relating to *perceived risk* as having an effect on trust (D. Chen et al., 2015; Jones & Leonard, 2014; Möhlmann, 2016; Sutanonpaiboon & Abuhamdieh, 2008; Utz et al., 2009; Zhang et al., 2014). Fear of seller opportunism (i.e. the fear that a seller will only behave in his own best interest) is a likely cause for experiencing risk (Jones & Leonard, 2014). A possible factor that can mitigate perceived risk is a buyer's risk propensity (Sutanonpaiboon & Abuhamdieh, 2008). This relates to a person's natural propensity to take risks and explains that decisions are not only taken on the basis of rational arguments, but are also predispositional (Stewart Jr. & Roth, 2001).

Four studies measured several *platform characteristics* that can enhance trust (Jones & Leonard, 2014; Kang et al., 2016; Y. Lu et al., 2010; Pavlou & Gefen, 2004). A platform can, for instance, provide structural assurances such as safety guarantees or escrow services (i.e. a bank account that is managed by a reliable third party) (Kang et al., 2016; Y. Lu et al., 2010; Pavlou & Gefen, 2004). Also, the recognition of a platform by a third party and the quality of their website contributes to trust development (Jones & Leonard, 2014).

A person's general *disposition to trust* was identified by seven studies as having an effect on trust (D. Chen et al., 2014; H. G. Lee & Lee, 2004; Y. Lu et al., 2010; Möhlmann, 2016; Pavlou & Dimoka, 2006; Schlaegel, 2015; Sutanonpaiboon & Abuhamdieh, 2008). Disposition to trust, defined as "a person's general willingness to trust others", is a stable within-party factor across situations and persons (Mayer et al., 1995, p. 715; McKnight & Chervany, 2001). Two studies identified several *buyer characteristics* that are influential regarding trusting beliefs towards sellers (Kwahk et al., 2012; Sutanonpaiboon & Abuhamdieh, 2008), namely, customer satisfaction, buyers' personal acquaintances and relationships, and buyers' knowledge and expertise. Kwahk et al. (2012) explain the effect of customer satisfaction by the fact that trust is built upon an accumulation of experiences. A positive experience would therefore lead to higher levels of trust.

The way a seller *responds to feedback* influences a buyer's trust, as identified by three studies (Malinen & Ojala, 2013; Strader & Ramaswami, 2002; Utz et al., 2009). Two aspects of feedback are important, namely, the speed of response (the faster, the better) (Malinen & Ojala, 2013; Strader & Ramaswami, 2002) and the content of the feedback. Further, the content of the feedback can influence a buyer's trust. As to the content, when a seller offers plain apologies, this positively affects a buyer's trust. Denials from a seller, on the other hand, have a negative effect on a buyer's trusting beliefs (Utz et al., 2009).

Nine studies found that *trust in the platform* also influences trust in the seller (D. Chen et al., 2014; X. Chen et al., 2015, 2014; H. G. Lee & Lee, 2004; Möhlmann, 2016; Thierer et al., 2015; Verhagen et al., 2006; W. T. W. Wang & Lu, 2014; Zhang et al., 2014). A platform, for example, can use guarantees and assurances to establish trust. For this reason, Möhlmann (2016) states that trust in the context of the sharing economy is a hierarchical, two-fold construct.

According to four studies, buyers value *seller verification* (Ha & Liu, 2010; Kang et al., 2016; Pavlou & Gefen, 2004; Teubner & Hawlitschek, 2016). Proper verification shows that a seller really exists and is not a fake. Verification can take forms such as a criminal background check, verification of a bank account, and certification or competence (e.g. a driver's licence).

Four studies measured different *seller characteristics* that influence trusting beliefs (Alfina et al., 2014; D. Chen et al., 2015; Malinen & Ojala, 2013; Teubner et al., 2015). The self-presentation of a seller in the form of well-written texts and high quality, detailed photographs provide cues for trustworthiness (Malinen & Ojala, 2013). Teubner et al. (2015) found that the use of photos and avatars increased perceived social presence which positively influenced trusting beliefs towards the seller. Also, a seller's perceived social capital, ability, and integrity are attributes that have a significant impact on the feeling of trust towards the seller (Alfina et al., 2014; D. Chen et al., 2015).

To conclude, trusting beliefs towards the seller is a concept that has received much academic attention. In relation to the seller, his/her reputation, verification, response to feedback, and characteristics play a role. On the buyer's side, the factors disposition to trust, perceived risk, and buyer characteristics are of importance. The marketplace itself also plays a role in building trust by platform characteristics and trust in the platform. On an interpersonal level, the interaction experience between the buyer and seller and familiarity are relevant in forming trust. Lastly, the quality of the information provided by the seller influences a buyer's trust.

Trusting beliefs towards the buyer

Amongst the five studies that examined trusting beliefs towards the buyer as their dependent variable, three identified factors relating to the use of *reputation systems*. Thierer et al. (2015) go so far as to claim that Akerlof's (1970) classical *lemons problem* (i.e. a situation of information asymmetry where a buyer runs the risk of purchasing a worthless good) is solved by the use of reputation systems. The trust people derive from a reputation system was also found by Liu et al. (2016) who studied users of Couchsurfing. It is not only ratings and reviews that are important in developing trust; Teubner and Hawlitschek (2016) add that verification and signalling also play a role. For example, a user can be identified

by displaying an email address or a phone number and can signal his popularity by integrating his social media accounts. Also, the way a user presents himself, for instance by profile pictures, was found to have an impact on trust (Teubner & Hawlitschek, 2016).

Sutanonpaiboon and Abuhamdieh (2008) found several *seller characteristics* that influence trust towards the buyer, such as a seller's general propensity to trust, knowledge, and expertise, risk propensity, prior transaction experience, and personal acquaintances and relationships. Additionally, a seller's disposition to trust and familiarity with the platform affect its trusting beliefs (Mittendorf, 2016). Lastly, a platform can offer assurances and support that can augment a seller's trust (Teubner & Hawlitschek, 2016).

In summary, reputational feedback mechanisms, familiarity with the platform, and assurances are platform mechanisms that influence trust. From a buyer's perspective, verification and signalling are ways to raise a seller's trust. Finally, various seller characteristics were found to contribute to the creation of trust.

Trusting beliefs towards the platform

Five studies found that the use of *security measures* by platforms enforces trust towards the platform (D. Chen et al., 2014; Kang et al., 2016; H. G. Lee & Lee, 2004; San-Martín & Camarero, 2014; Zhang et al., 2014). Platforms can institute diverse measures that can function as protection of privacy and security, e.g. authentication, encryption, and integrity (D. Chen et al., 2014). Three studies found that guarantees offered by a platform contribute to trust (Möhlmann, 2016; San-Martín & Camarero, 2014; Teubner & Hawlitschek, 2016). Airbnb, for example, implemented diverse specific tools to enhance trust in doing business, whereas Peerby does not guarantee any transactions at all.

The *quality of the service* offered by a platform is influential in increasing consumer trust, as found by three studies (D. Chen et al., 2014; San-Martín & Camarero, 2014; Zhang et al., 2014). Service quality can be understood, among other things, as offering a wide range of products, prompt delivery, and responsiveness to clients' needs (San-Martín & Camarero, 2014). Two studies showed that the *quality of platforms' websites* influences trust (Gregg & Walczak, 2010; Teubner & Hawlitschek, 2016). Gregg and Walczak (2010, p. 5) define website quality as "the attributes of a website that contribute to its usefulness to consumers". Examples of such attributes are information quality, ease-of-use, usability, aesthetics, trust building technologies, and emotional appeal (Gregg & Walczak, 2010). Furthermore, the *reputation of a platform* was found to have an influence on trust by two studies (H. G. Lee & Lee, 2004; Möhlmann, 2016). One study found that third-party recognition (e.g. a third-party seal, accreditation) influences trust in the platform (Kang et al., 2016).

Three studies identified that the *risk a buyer runs* when doing business via C2C platforms has a negative effect on trust in the platform (J. Lu et al., 2012; Möhlmann, 2016; San-Martín & Camarero, 2014). Two studies found that *buyer characteristics* affect trust in the platform (J. Lu et al., 2012; Y. Lu et al., 2010). Yaobin Lu et al. (2010) found that disposition to trust affects trust towards the platform, as is also the case for the characteristic optimism (i.e. a positive view of technology) (J. Lu et al., 2012). The importance of *interpersonal trust* – an orientation of one actor toward a specific person (Simpson, 2007) – is recognised by three studies (J. Chen et al., 2009; Kang et al., 2016; Y. Lu et al., 2010). For instance, mutual trust between members of a C2C platform extends to trust in the provider (J. Chen et al., 2009). Furthermore, Kang et al. (2016) found that *project characteristics*, in the context of crowdfunding, affect trust towards the platform. Specifically, perceived informativeness (i.e. the ability to provide necessary information to customers) and network externality (i.e. the more users support a project, the less uncertainty it has) are identified as influencing factors.

In summary, from a platform perspective, five dimensions of trust were found: safety measures, guarantees, website quality, service quality, and reputation of the platform. From a buyer's perspective, perceived risk and buyer characteristics play a role in forming trust. Next, the characteristics of a project, which link to the properties of a transaction, are important. Lastly, trust developed between actors influences trust towards a platform.

Trusting beliefs towards the community

Chen et al. (2009) found that *social interactions* between members of a community affect trust in the community as a whole. They found two types of social interactions that are of importance: informational interaction (i.e. the interaction of information and knowledge) and emotional interaction (i.e. an environment that is felt as supportive and welcoming). In a study by Chiu et al. (2010) on trust in an online auction market, bidding justice (i.e. a buyer's overall perception of fairness and treatment received from the seller) was found to influence trust in the community. Concluding, social interactions between members and perceived justice are factors that influence trusting beliefs towards the community.

Trust-related behaviours

Four studies that examined effects on trust-related behaviours were reviewed such as which buyer is chosen and which price is offered. Of these, three studies found a positive effect of the use of a *seller's profile picture* on buyers' behaviour. Ert et al. (2016) conclude that visually based trust significantly influences buyers' choice and price. This is especially the case when there is low variance in sellers' reputation. Additionally, the perceived attractiveness of a seller was found to affect choice in a comparable manner. The importance of a seller's profile picture on consumer choice was also supported by Bente et al.'s (2012)

study. Trustworthy photos lead to significantly higher trust ratings as well as purchases. These positive effects seem to be cross-cultural. In an online trust game, the use of avatars had a positive effect on purchasing behaviour for both German and Arab players (Bente et al., 2014). The effect can be explained by the fact that transactions in the sharing economy are more social and personal by nature and “human faces create trust as a prerequisite for peer interaction” (Teubner & Hawlitschek, 2016, p. 16).

One study reported that the *characteristics of a seller* have a positive influence on buyers’ behaviour. Greiner and Wang (2010) tested three categories of seller characteristics on the likelihood of funding: economic status (e.g. credit grade, debt-to-income ratio), social capital (e.g. group rating, endorsements), and listing quality (e.g. description length, availability of an image). All categories proved to influence the likelihood of funding.

To conclude, a seller’s profile picture and characteristics are important seller attributes that influence a buyer’s trust-related behaviour.

DISCUSSION

This literature review aimed to collect and synthesise the antecedents that influence trust in the sharing economy. We reviewed the literature regarding trust in C2C e-commerce and in the sharing economy and integrated the variety of factors that are in play when trust is being developed.

In the discussion about the future of the sharing economy, trust seems to be generally recognised as the most important driver (e.g. Botsman, 2012; Ufford, 2015). Consumers who are not participating in the sharing economy seem to be particularly deterred by the risks involved, and to have difficulty overcoming the barrier of trust (Hawlitschek, Teubner, & Weinhardt, 2016). Nevertheless, research into trust in the sharing economy is still very limited; out of 45 studies, we found only nine that specifically examined trust in the sharing economy. In addition, of those nine studies, only one examined the more idealistic side (i.e. Couchsurfing) of the sharing economy, whereas the majority of studies focused on the commercial end of the continuum.

To account for the different ways in which trust is investigated across studies, we used McKnight and Chervany’s (2001) trust typology to categorise the different types of trust. In doing so, we refined the concept *trusting beliefs*. We subdivided this concept into trusting beliefs towards the seller, the buyer, the platform, and the community in order to obtain a more context-specific view of how trust is established. Additionally, we linked the various antecedents that the literature

indicates as explaining trust to the different types of trust, subdivided according to the entities involved (i.e. seller, buyer, platform, interpersonal, and transaction).

Most of the reviewed studies focused on trusting beliefs towards the seller, thereby not doing justice to the peer-to-peer nature of the sharing economy. For instance, the concept of perceived risk has not been researched from a seller perspective, although trust is likely to be just as important for them as they provide access to their assets. Also, transactions in the sharing economy are concluded with an offline, often face-to-face encounter, mostly at the seller's location. This involves a larger risk for the seller than for the buyer as his personal address is compromised. In contrast, when a buyer books an apartment, for example, and it does not meet his standards, both the financial consequences (i.e. the buyer risks only the booking costs) and the product risks (i.e. a disappointing apartment experience) are low.

Furthermore, reputation is often regarded as the panacea for establishing trust (e.g. Schlegel, 2014; Thierer et al., 2015), and much research is devoted to comprehending the working of this mechanism. Although reputation is invaluable for creating trust, our study shows that trust encompasses much more than reputation alone. To illustrate, a buyer's disposition to trust greatly affects the probability of engaging in the sharing economy. To understand trust in the sharing economy, the full spectrum of antecedents should be taken into account.

To get a better grasp on how trust is influenced in the sharing economy, we combined findings from the field of C2C e-commerce with those in the sharing economy. To examine how the different findings influence trust in the different contexts, we delineate it per trust type. As to institution-based trust, no antecedents were found specifically in the sharing economy studies, while the C2C e-commerce studies identified multiple antecedents relating to the platform. For trusting beliefs towards the seller, their antecedents found in both the sharing economy and in C2C e-commerce are reputation-related. Trusting beliefs towards the buyer in the sharing economy have been found to be influenced by several antecedents related to the platform, the buyer and the seller, whereas for C2C, only antecedents were found relating to the platform and the seller. Much overlap in antecedents exists between the sharing economy and C2C e-commerce with regards to trusting beliefs towards the platform; these are mainly related to the platform and the seller. Lastly, trust-related behaviours are in both contexts under-researched (that is, in total, only two antecedents were found).

This breakdown of antecedents in the two different contexts shows that the different types of trust, conceptually, do not differ much from each other. This does not apply to institution-based trust, which is not surprising given that it is the institutional safeguard that distinguishes transactions in the sharing

economy from traditional transactions. Although building and sustaining trust in the sharing economy seems to be more complex than other forms of e-commerce (Hawlitcshek, Teubner, Adam, et al., 2016), there is much overlap in antecedents and types of trust. We are therefore confident that C2C e-commerce proves to be a valuable research field to inform future research on trust antecedents in the sharing economy.

To direct future research on trust in the sharing economy, our systematic review leads to several suggestions. First, the current body of literature on antecedents of trust in the sharing economy is meagre – all the more so compared to the rapid growth of the sharing economy itself and the importance imputed to trust. Because the sharing economy is expected to continue growing at a fast pace, it is crucial that we continue to investigate how trust is established.

Second, future work should address the seller's perspective when examining trust. In the current research, trust has been mainly researched from the buyer's point of view. This could result from incorporating traditional C2C e-commerce research wherein the position of the seller has not undergone any substantial changes. In the sharing economy however, the seller often faces larger risks, meaning that a seller has to overcome a trust barrier as well. This is an important point to address, especially to ensure the future supply of goods and services in sharing markets.

Third, the sharing economy can be seen as a collection of marketplaces each with a different take on sharing. If one views the sharing economy as a continuum ranging from commercial to idealistic (cf. Habibi et al., 2016), most research has focused on the commercial side of the continuum. Platforms on the idealistic side deserve more research attention, because such platforms aim for social and sustainable goals (e.g. Couchsurfing and Peerby). It is conceivable that, on these types of platforms, trust is built on different trust mechanisms, such as a sense of community, intrinsic motivation of participants, and social norms and values.

As a final issue, most studies use survey data to investigate trust, resulting in measures of perceptions, expectations, and attitudes towards trust. Research based on actual trust-related behaviour in the sharing economy is scarce, although this would be very valuable as it would show the actual working of trust mechanisms (see also Hawlitcshek, Teubner, Adam, et al., 2016). Also, more qualitative research would be welcome, as this type of research could reveal in-depth user stories and experiences underlying the working of trust.

LIMITATIONS

In light of the above-discussed results and research directions, our study has several limitations. We end this review by signalling some limitations of the reviewing process. First, only one reviewer was involved in the reviewing process of screening and selecting papers, making this process vulnerable to some selection bias. Nevertheless, we deem the error sensitivity low because the exclusion criteria and search terms were drafted in discussion with all authors involved, and the coding process is quite straightforward. Second, it is possible that trust mechanisms relevant to the sharing economy are not included in the results because these are not researched by the studies selected. Examples of such mechanisms could be the role of the government, intercultural contexts, and economic cyclical influences. Future research should address this.

In summary, to our knowledge, this review is the first to provide an overview of research results on how trust is developed in the sharing economy. We have brought together a scattered research field by drawing upon several streams of literature and synthesising the various results using a well-known trust typology. The results provide a starting point for researchers investigating trust in the sharing economy, highlight knowledge gaps, and point to future research directions. By helping to unravel the trust puzzle, we hope to contribute to a viable sharing economy.

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REPUTATION EFFECTS IN SOCIALLY DRIVEN SHARING ECONOMY TRANSACTIONS

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ABSTRACT

Reputation has often been proposed as the central mechanism that creates trust in the sharing economy. However, some sharing platforms that focus primarily on social rather than economically driven exchange have managed to facilitate exchange between users without the use of a reputation system. This could indicate that socially driven exchanges are in less need of reputation systems and that having sufficient trust is less problematic. We examine the effect of seller reputation on sales and price as proxies for trust, using a large dataset from a Dutch meal sharing platform. This platform aims to stimulate social interactions between people via meal sharing. Multilevel regression analyses were used to test the association of reputation with trust. Our main empirical results are that reputation affects both sales and price positively, consistent with the existing reputation literature. We also found evidence of the presence of an information effect, i.e. the influence of reputation on sharing decreases when additional profile information is provided (e.g. a profile photo, a product description). Our results thus confirm the effectiveness of reputation in more socially driven exchanges also. Consequently, platform owners are advised to use reputation on their platform to increase sharing between its users.

INTRODUCTION

Reputation is often heralded as the reason why strangers trust each other via the internet (Resnick et al., 2000) because it fosters trust between individuals by informing potential buyers about a seller's past behaviour and gives a buyer the possibility to sanction a seller if the latter engages in opportunistic behaviour (Dellarocas, 2003; Resnick & Zeckhauser, 2002). However, with the rise of the sharing economy, exchanges have become more socially driven, thereby providing reasons why trust is developed through social mechanisms entailing a possible decreasing effect of reputation on trust. So far, the effect of reputation on online trust has been investigated mainly in the context of commercial platforms (e.g. eBay, TaoBao, and Airbnb), leaving the question of its effect in a socially driven context unanswered.

The rise of sharing platforms, such as Uber, Airbnb, and TaskRabbit, have changed consumption from a practice of ownership-based consumption into a blend of ownership and sharing (Botsman & Rogers, 2010). This type of consumption has been termed the sharing economy, a socio-economic system in which products and services are exchanged between individuals via internet-based applications (Arcidiacono, Gandini, & Pais, 2018). Although many platforms are considered part of the sharing economy, there is great heterogeneity among them. One way to categorize platforms is by the way they facilitate economically and socially driven exchanges. Platforms that facilitate economically driven exchanges fulfil users' economic needs, for example, by providing the possibility to make profits and by scaling trading activities. The accommodation platform Airbnb, for instance, enables homeowners to earn a living through easy access to booking opportunities. Conversely, platforms can arrange socially driven exchanges by satisfying users' social needs through the creation of social connections with others and the development of a sense of community. An example is the free accommodation platform Couchsurfing, which aims to provide social interaction and cultural exchange between travellers. Such platforms contribute to social sustainability (i.e. collective aspects of social life) through stimulating social interactions and enhancing a sense of community (Dempsey, Bramley, Power, & Brown, 2011).

For both types of exchanges, reputation can be effective in building trust because the public display of an actor's past actions could lead to future consequences, thereby creating an incentive to show good behaviour (Rousseau, Sitkin, Burt, & Camerer, 1998). Especially in a situation where actors are self-interested and will behave opportunistically when given the chance, reputation is a useful mechanism. However, socially driven exchanges can be expected to involve parties who are loyal, care for the common good, assume multiple responsibilities, and have a propensity to resolve conflicts in harmony (Achrol & Gundlach, 1999). Thus, such actors are less likely to act out of self-interest and to

behave opportunistically. Consequently, the anticipated prosocial motivation of others might reduce one's need for reputation when trusting others.

Based on the above, it can be expected that the development of trust between users depends on the extent to which platforms provide for economically or socially driven exchanges and on the extent to which platform users are prosocially motivated. The tool and equipment platform Peerby, for instance, does not have a reputation system to facilitate trust, and users have to rely on the benevolence and integrity of others to trust. One might assume that trust on such sharing economy platforms can be developed more easily. However, we argue that socially driven exchanges also involve trust issues that entail reputation effects when a reputation system is available, because one might want to sanction the other in the event of untrustworthy behaviour. In addition, someone's trustworthiness might also be judged via judgments of others rather than only one's own experience.

Our study contributes to the literature in the following way. First, it sheds light on the effect of reputation in socially driven exchanges in the sharing economy. We thereby respond to the call for research by Belk (2010), who questions whether reputation facilitates trust equally across the spectrum of sharing economy platforms. Furthermore, we extend the existing body of literature regarding reputation effects beyond the context of economically driven exchanges. Most studies have investigated the effects of reputation in economically driven exchanges (especially eBay, Airbnb); this makes it uncertain whether the same effects hold in socially driven exchanges.

The specific objective of this study is to investigate the role of the effect of reputation on trust in a socially driven exchange setting in the sharing economy. Our main research question is: *To what extent does reputation promote trust in socially driven exchanges in the sharing economy?* To answer this question, we used a dataset of a Dutch meal sharing platform, Shareyourmeal (SYM), containing longitudinal transaction data from the start of SYM in March 2012 until March 2016. The main aim of this platform is to stimulate social interactions between users via the act of sharing meals, and prices are mostly only marginally above the price of the ingredients, making the social aspect of the exchange substantial and the economic aspect largely negligible. Consequently, this platform offers the opportunity to study the effect of reputation on trust in a socially driven exchange setting.

This article begins by providing a background of the sharing economy, trust and reputation. It will then go on to hypothesis development, data description, and research method. Subsequently, the results and the conclusions are presented, and lastly, implications for both theory and management are provided.

BACKGROUND

The sharing economy has been growing rapidly and has gained in popularity among the general population through an expanding ecosystem of online platforms (Palos-Sanchez & Correia, 2018; Sundararajan, 2014). It is an ecosystem that contains various economic practices, ranging from providing accommodation free of charge (e.g. Couchsurfing) to finding a paid pet sitter (e.g. PetHomeStay). Besides a changing consumption mode, corporations are also affected in the sense that traditional business models are pressurised and new business models are becoming more evident (Owyang, 2013). The emergence of the sharing economy has intrigued many researchers given its impact on society, the economy, and the environment. Moreover, the popularization of the sharing economy was initially accompanied with hopeful promises for the way we consume, work, and interact (Botsman & Rogers, 2010). Sharing resources would mean that we could own less, interact more with one another, and provide economic benefits for ordinary people (Schor, 2014). However, in practice, it was found that sharing could lead to adverse effects, such as more consumption, racial discrimination, and a precarious position for workers (Edelman & Luca, 2014; Frenken & Schor, 2017). Moreover, environmental drivers appear to be of minor importance for users to participate in the sharing economy (Barnes & Mattsson, 2016). The title of Martin's article "The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism?" illustrates the ambiguous attitude towards the sharing economy.

Notwithstanding such criticism, it is notable that most of the critique on the sharing economy concerns large commercially oriented platforms, such as Uber, Airbnb, and TaskRabbit. Additionally, most of the research on the sharing economy is directed at this type of platform (ter Huurne, Ronteltap, Corten, & Buskens, 2017), because, among other things, they are viewed as exemplars of the sharing economy, their impact on incumbents is greater (e.g. Blal, Singal, & Templin, 2018; Zervas, Proserpio, & Byers, 2017), and more research data are available. As a result, sharing platforms that emphasize socially driven exchanges do not receive the same academic attention (Albinsson & Perera, 2012; J. Y. Chung, 2017), although first and foremost they possess and contribute to public values. For example, by building stronger communities through the increase of social interactions, participation in the community, and perceived safety of community members (Dempsey et al., 2011). Research into the functioning of such platforms would, therefore, be welcome because it could advance the understanding of how these platforms operate and consequently contribute to the enhancement of public values.

The term sharing economy is not commonly agreed upon (Hawlitschek, Notheisen, & Teubner, 2018). The reasons for this include the rise of a multitude

of platforms and ambiguity around the concept of sharing, which have resulted in disagreement about a precise definition of the sharing economy (Dredge & Gyimóthy, 2015). However, key elements of the sharing economy include the exchange of goods and services among peers, providing temporary access to individuals, while using online platforms as a mediator (Botsman & Rogers, 2010). To include these elements, we define the sharing economy as “an economic model based on sharing underutilized assets between peers without the transfer of ownership, ranging from spaces, to skills, to stuff, for monetary or non-monetary benefits via an online mediated platform” (ter Huurne et al., 2017, p. 2).

Regarding actors in the sharing economy, buyers are often referred to as consumers and sellers as providers (Schor, 2014). To connect with common terminology, we use these terms throughout this study.

Information Asymmetry in the Sharing Economy

One of the largest impediments for people to participate in the sharing economy is perceived risk, which is caused by different information asymmetries (Hawlitschek, Teubner, & Gimpel, 2016). Information asymmetry is the situation where one party has more or better information than the other. According to Akerlof's classical lemons problem, information asymmetry allows a buyer to run the risk of buying a worthless good, but this could ultimately end in market failure. The sharing economy brings forth several information asymmetries between consumers and providers. First, consumers cannot inspect goods upfront or are unsure about a provider's ability to perform services. This makes it difficult for consumers to distinguish between low- and high-quality providers (Bae & Koo, 2018). Also, both consumers and providers are unsure about each other's true intentions, which are important because meeting offline can entail personal safety risks. Lastly, the absence in most cases of legal safeguards heightens the risks for both consumers and providers in the event of theft, damage, or loss of products. To mitigate the situation of information asymmetry, trust is identified as one of the key ingredients for successful transactions in the sharing economy (Horton & Zeckhauser, 2016; Tussyadiah, 2015); and research has shown that reputation is one of the most important mechanisms for facilitating trust in the sharing economy. Mauri et al. (2018), for instance, found that a provider's reputation was the core contributor to the popularity of an Airbnb listing, explaining almost 40% of its variation. Therefore, we use reputation to study how trust is formed between users in socially driven exchanges.

Trust and Reputation

Trust is studied extensively across different disciplines, such as psychology, sociology, and management (Beldad et al., 2010). Although there is no universally accepted definition of trust, a much-used definition is that of Mayer et al. (1995,

p. 715), who define trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.” It is needed in situations where risk and interdependence exist (Rousseau et al., 1998), meaning that a person is willing to accept vulnerability and uncertainty. Risk is the perceived probability of loss, whereas interdependence implies that a person is dependent on someone else for his interests to be served (Rousseau et al., 1998). As mentioned above, both elements are present in transactions in the sharing economy.

Reputation has proved to be an important trust mechanism in the sharing economy (Tadelis, 2016; Zervas et al., 2017) and can be defined as “what is generally said or believed about a person’s or thing’s character or standing” (Jøsang, Ismail, & Boyd, 2007, p. 5). Reputation in the sharing economy has often been operationalized through reputation systems, which collect feedback from members of a community regarding past transactions with other members (Dellarocas, 2003), for example, in the form of ratings, referrals, and comments. Jøsang et al. (2007) have given an overview of existing and proposed reputation systems, indicating that they are effective in creating collaboration between parties unknown to each other. Nonetheless, various sharing platforms that focus on socially driven exchange have found a way to create collaboration between their users without the use of reputation systems. Peerby, for example, enables people to lend or borrow tools and equipment via a mobile app. When placing a request, and users are matched, there is no reputation information available for either the consumer or the provider. In an interview⁷, Peerby announced that more than 250,000 people use its service, thereby indicating its popularity. This raises the question of whether a reputation system is needed when the exchange is mainly socially driven.

According to Buskens and Raub (2002), reputation can facilitate trust via two mechanisms, namely, control and learning. Control applies to a situation where a provider has short-term interests in abusing trust, although at the same time he is dependent on the buyer for his long-term results. In online transactions, providers can exercise control over sellers by rewarding or punishing sellers with positive or negative feedback. Learning refers to the information a buyer has at his disposal about a seller’s characteristics, obtained from third parties’ first-hand experience. If a buyer is informed that a seller has been trustworthy in the past, he might be more convinced that the seller will act trustworthily in the future as well.

⁷ <https://www.nu.nl/ondernemen/5082410/daan-weddepohl-peerby-ik-heb-altijd-uitvin-der-willen-worden.html>

In socially driven exchanges, trust in an actor might be based mainly on anticipating prosocial norms and values that are prevalent in a community. Prosocial norms (e.g. “pay it forward”, “do not treat others as you would not like to be treated”) are important for promoting cooperative behaviour, because a socially driven exchange occurs without the specification of any contract and with unspecified future obligations (Blau, 1964). It has been shown that norms are a strong predictor of associated behaviour (Cialdini et al., 2006). Therefore, prosocial norms imply that users can trust others based on expectations of what the group norm prescribes. Further, individuals who possess prosocial values (e.g. fairness, reciprocity) are more likely to think in a collective manner and are more cooperative towards others (De Cremer & Van Lange, 2001). Although norms and values might be expected to be omnipresent on platforms driven primarily by socially driven exchange, there can still be uncertainty about whether everyone follows such norms and values. Beliefs about whether specific individuals on a platform indeed follow the expected norms and values can be learnt through people’s interactions when transacting, and, when positive, these interactions can form a trusting base to trust unknown others. In addition, the attractiveness of a partner for a specific socially driven exchange, such as how good an SYM provider is, is also uncertain for a consumer. This is an additional aspect about which a consumer can learn through a reputation system.

To see whether anticipated prosocial norms and values on a platform might be an alternative mechanism to create trust and complement the necessity for reputation to engender trust, we study reputation effects in a context in which we suspect that prosocial norms and values are more important than in a more economic context in which reputation effects are found.

Hypotheses

Many studies have demonstrated the positive effect of reputation on sales and price, which serve as proxies for trust (for reviews, see Bajari & Hortaçsu, 2004; Diekmann, Jann, Przepiorka, & Wehrli, 2014). For instance, one of the earliest studies into reputation effects on online marketplaces by McDonald and Slawson (2002) found that reputation had a positive effect on the closing price of an auction for Harley Davidson Barbie dolls. A more recent study by Przepiorka, Norbutas, & Corten (2017) found that, for sellers in a cryptomarket for illegal drugs, a positive reputation influences both selling price and the number of sales. Because sales and price are widely used variables to measure trust, we use both variables in our analyses.

The positive relation between reputation and sales can be explained by the fact that a provider with a good reputation signals to potential consumers that he has shown trustworthy behaviour in the past and thus is likely to show trustworthy behaviour in the future (Ye, Xu, Kiang, Wu, & Sun, 2013).

In the SYM case, a consumer can use a provider's reputation as an indicator that he or she is able to satisfy other consumers by putting together quality meals. We thus hypothesize that:

H1: At SYM, reputation is positively associated with the sale of a meal by a provider.

Next, in a situation with information asymmetry, the fact that consumers are unable to inspect the goods upfront makes it difficult for them to observe the quality of a product. A provider's reputation might, therefore, serve as a signal for product quality, because consumers are willing to pay extra in return for receiving quality products (Shapiro, 1983). Consumers on SYM, who have to choose between providers, might therefore be willing to pay more to providers with a higher reputation, because reputation increases their trust in the quality of the product. Hence, we hypothesize the following:

H2: At SYM, a provider's reputation is positively associated with the price of a meal.

Moderators of the Effect of Reputation

The effect of reputation on sales does not occur in isolation; even more so, other profile elements such as a profile picture and description, and a product photo and description, may also play a role in the ordering process. For instance, an experiment conducted by Xu (2014) showed that the presence of a reviewer's profile picture had a positive effect on his trustworthiness, especially when a review was negative. The presence of certain profile elements could provide additional information about the provider and the product, and thus improve consumers' information asymmetry position, making them less reliant on reputation information. We therefore propose that the presence of various profile elements could decrease the effect of reputation on both the probability of selling a meal and on the price of a meal.

In the SYM case, we believe that all the profile elements (i.e. a profile picture and description and a product photo and description) have a negative moderating effect on the relation between reputation and both dependent variables (i.e. whether a provider shares a meal or not and the price of a meal). Reputation and profile elements can have a complementary effect when a consumer is unsure about making a decision based on reputation alone (e.g. when the provider has little or no reputation). The availability of profile elements could reduce uncertainty about the provider and the meal. For example, it is likely that consumers would trust a provider with a profile picture and consequently pay less attention to reputation, and in the case of a provider who does not have a profile picture the effect of reputation is more important for trust. We suggest that this moderating effect holds for all profile elements. Because in addition to profile or product pictures the number of words in profile or product descriptions

have proved capable of increasing trust (Ma, Hancock, Mingjie, & Naaman, 2017), we propose the following hypotheses:

H3a: The effect of reputation on the *probability of selling a meal* decreases with the presence of a profile picture.

H3b: The effect of reputation on the *price of a meal* decreases with the presence of a profile picture.

H4a: The effect of reputation on the *probability of selling a meal* decreases when a profile description contains more words.

H4b: The effect of reputation on the *price of a meal* decreases when a profile description contains more words.

H5a: The effect of reputation on the *probability of selling a meal* decreases with the presence of a product picture.

H5b: The effect of reputation on the *price of a meal* decreases with the presence of a product picture.

H6a: The effect of reputation on the *probability of selling a meal* decreases when a product description contains more words.

H6b: The effect of reputation on the *price of a meal* decreases when a product description contains more words.

Figure 3.1 displays the theoretical constructs of this study and the underlying hypothesised relations.

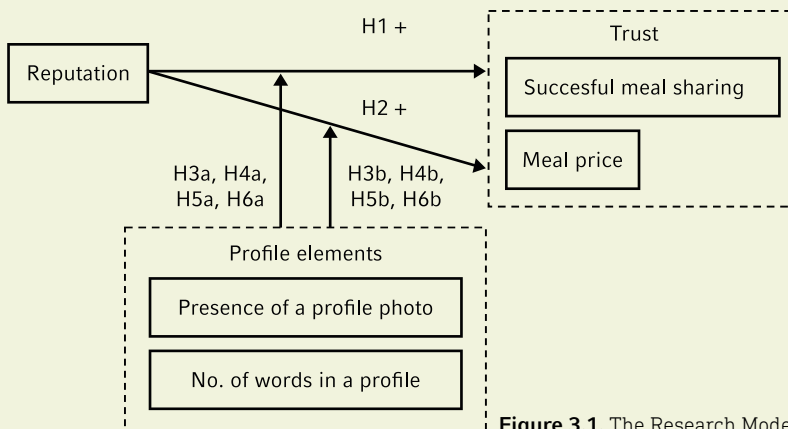


Figure 3.1. The Research Model.

THE EMPIRICAL CONTEXT

The context of our study is SYM, one of the largest sharing platforms in The Netherlands. In this section, we describe how SYM facilitates socially driven exchange, and, subsequently, we describe a typical transaction on this platform.

SYM was founded in March 2012 with the mission to bring people together through sharing meals between neighbours in The Netherlands. In the participants' view, food is the liaison between social interactions. Furthermore, they believe that sharing food helps to reduce food waste and additionally they want to encourage people to eat healthily. In that sense, SYM not only contributes to social sustainability (i.e. stimulating social interactions) but also to environmental sustainability (i.e. reducing food waste). SYM fits with our definition of the sharing economy because the skills of providers are being shared with consumers for a monetary compensation via the SYM website. At the time of the study, 14,971 providers and 94,110 consumers had joined the platform, and 96,797 meals were offered.

SYM facilitates socially driven exchange in a number of ways. First, the act of sharing meals provides social links to others, because providers and consumers meet in real life and have the opportunity to deepen social contact. This is also apparent from the motivation of providers to participate on the platform. They view their activities as "entrepreneurship for the sake of communitarian well-being" (Dagevos & Veen, 2018, p. 11), thereby emphasizing the importance of social links to other users. Moreover, they do not view their meals as a commodity but as a contribution to society at large. Second, transactions are carried out in a sharing context. Providers give access to their private homes to unknown consumers and share their cooking skills with others. The context of picking up a meal at someone's private residence is clearly distinguishable from, for example, buying a meal at a supermarket. The latter context is indicative of economically driven exchange, which is impersonal and bears signs of commercial exchange (e.g. cashiers, billboards). Third, meals that are shared via the platform are inalienable from the provider. In commodity exchange, the goods that are exchanged are alienable from the owner; it does not matter with whom we exchange. Sharing meals, however, is unequivocally connected with, and inalienable from, the provider, thus underlining the personal and social nature of the exchange. Finally, although money is involved in the transaction, it is just a mere compensation for groceries and the use of gas and electricity. According to SYM, it is explicitly not its goal to pursue profit maximization, nor would it be logically possible to earn a lot of money via the platform because cooking meals is not scalable. In sum, SYM offers a suitable case study to investigate the effect of reputation on sales and price, because the type of exchange can be predominantly characterized as social.

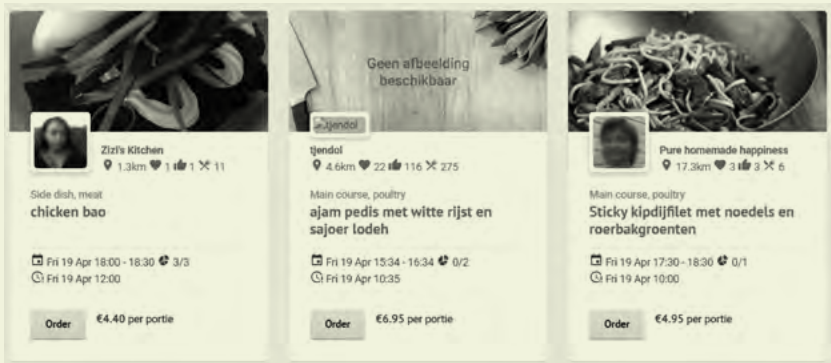


Figure 3.2. Example Overview of Meal Listings.



Figure 3.3. Screenshot of a Provider Profile at Shareyourmeal.

Let us describe the ordering process before turning to the data and research method. When a consumer searches for a meal, a list of meals is presented with item titles, a short item description, price, distance to the provider, and the provider's location (see Figure 3.2). Clicking on a meal reveals a visual and textual description of the meal (if present). If a meal has received *thank you notes* or ratings from consumers in the past, they are shown here. On the meal page, it is possible to click further on the provider's profile page. The profile page provides several statistics about the provider, such as the number of meals shared, the number of followers, the number of received thank you notes, and the number and type of badges (see Figure 3.3). Also, a consumer can check whether the details of a provider are verified, whether a Facebook account is connected, and whether there are satisfied consumers. It is also possible to view all the thank you notes received by the provider.

DATA AND METHOD

The dataset provided to us by SYM consisted of anonymous information about 10,619 providers and 96,797 meals offered. Given that a provider can offer a meal multiple times, the unit of analysis is meals offered, which are nested within providers. To strive for a more homogeneous sample, only main courses were included in the analysis, leaving a total sample of 164,871 meals offered, 73,571 unique meals, and 8,441 providers.

The dataset covers the period March 2012 to March 2016; this has the advantage of observing the evolution of a provider's reputation over time. All other provider and meal variables were fixed across the dataset.

Dependent Variable

Our main target variables were whether a meal offered was successfully shared or not (dichotomously measured: 0 = unsuccessfully shared; 1 = successfully shared) and the price of a meal in euros. In total, 75,684 meals offered (54.10%) were successfully shared, and 89,187 meals (45.90%) were offered but not picked up. This provided us with the possibility to compare meals that were successfully offered and picked up against meals that were offered but were unsuccessful in finding consumers.

Analysis of the meal price showed that the dataset contained illogical outliers (e.g. a meal price of € 1,000,006), most probably due to incorrect data entry by the provider. To exclude such outliers, we used a cut-off point at the 99th percentile (i.e. € 10), because outliers can have a disproportionate influence on future analyses. This left us with a final sample of 75,390 (46.14%) successfully and 88,011 (53.86%) unsuccessfully shared meals and 8,355 providers.

Independent Variable

To operationalize reputation, we used the number of thank you notes received by a provider. Because of a skewed distribution, a log transformation was made to improve model fit (Field, 2009). Thank you notes are textual comments used mainly to leave positive feedback. Although it is possible to express criticism, this is rarely done. It is above all a token of affect and appreciation. Nonetheless, the number of thank you notes could be perceived as a substitute for reputation. That is to say, more thank you notes could indicate that a provider is highly appreciated by consumers, whereas few or no thank you notes might be a sign of low appreciation or limited experience by consumers.

Control Variables

We included several control variables in our model. First, to take account of the longitudinal nature of the data, we included a dummy variable for each calendar month when a meal was offered, to control for a possible time-trend. Next, to account for the possible demand and supply in a certain area, we respectively used the number of households and the ratio of the number of meals offered per household in a four-digit postal code area. Further, the number of shared meals could be influenced by the disposable income of a household, i.e. the higher a household's income, the higher the demand. We therefore included the mean standardized income of households in a four-digit postal code area.⁸ The data for number of households and households' disposable income were derived from, respectively, Statistics Netherlands 2013 and 2014.

Additionally, we controlled for the presence of a product photo and whether the provider uploaded a profile picture (Ert et al., 2016). Research has shown that facial expressions are important signalling systems that can influence buying behaviour (Fagerström, Pawar, Sigurdsson, Foxall, & Yani-de-Soriano, 2017). To analyse the providers' facial expressions displayed in their profile pictures, we used Microsoft Azure Face API to scan the images in an automated way for emotions. To ensure that the automated emotion scores complied with real-life judgments, a random sample of 100 profile pictures was drawn, and these were manually judged and coded according to the same emotion classification. Analysis showed that only the happiness emotion correlated strongly enough with human ratings ($r = 0.82$) and was therefore the only emotion included in the regression analyses. Next, a provider's profile shows how many meals he or she shared in the past. This information could affect a provider's perceived trustworthiness, because the more meals he or she has shared in the past, the

⁸ The variables number of households, ratio number of offerings per household, and mean standardized income per household per four-digit postal code area contained fewer than 0.41% missing values. We used multiple imputation on these variables to impute missing values. Results using multiple imputation and listwise deletion are largely similar, so listwise deletion results are presented.

more other people have trusted him or her. We therefore controlled for the total number of meals shared by a provider at the time of the offering. Finally, previous research has shown that the number of words in a profile description can influence trustworthiness perceptions (Ma et al., 2017). We therefore controlled for the number of words in a provider's profile description as well as the meal description. The descriptive statistics of all variables are presented in Table 3.1.

Table 3.1. Descriptive Statistics

Dimension	Name	N	Mean	Median	Std. dev.	Min	Max
Dependent variable	Meal successfully shared	163,401	0.46	0	0.50	0	1
	Meal price	163,401	5.16	5	1.46	0	10
Independent variable	Number of thank you notes	163,401	139.02	34	329.65	0	3,277
Control variables	Presence of a product photo	163,401	0.72	1	0.45	0	1
	Presence of a provider's profile picture	163,401	0.88	1	0.33	0	1
	Degree of happiness in provider's profile picture	163,401	0.16	0	0.35	0	1
	Cumulative number of shared meals	163,401	141.73	35	335.36	0	3,313
	Number of words in a profile description	163,401	112.79	60	255.16	0	1,832
	Number of words in a product description	163,401	28.34	21	24.80	0	876
	Mean standardized income per household per four-digit postal code area	163,401	24.69	24.60	4.39	13.50	63.80
	Ratio number of offerings per household per four-digit postal code area	163,401	149.63	92.86	181.74	0.18	1,135
	Calendar month (50 dummies)			<i>Not shown</i>			
Seller characteristics	Total number of offerings per provider	10,619	19.98	3	82.11	1	3,807
	Total number of transactions per provider	10,619	14.02	1	80.24	0	3,313
	Total turnover per provider	10,619	69.59	2.75	426.16	0	19900.75
	Total number of thank you notes per provider	10,619	13.50	0	79.70	0	3,277

Statistical Procedure

To test Hypotheses 1 and 3 to 6, we used multilevel logistic regression. Logistic regression is used to predict a dependent variable that is classified as binary, based on one or more predictors (Long & Freese, 2014). In our case, the dependent variable (i.e. the successfulness of a meal) was measured binary. In multilevel research, the structuring of data in the population is hierarchical, and a sample from this data can be viewed as a multilevel sample (Snijders

Table 3.2. Regression Models of Meal Successfully Shared and Meal Price

Variable name	Meal successfully shared (y/n)			
	Model (1)	Model (2)	Model (3)	Model (4)
Number of thank you notes (log)	0.103*** (0.016)	0.065*** (0.017)	0.090*** (0.007)	0.091*** (0.008)
Cumulative number of shared meals ^b	0.008 (0.014)	0.049*** (0.015)	-0.02*** (0.005)	-0.016* (0.007)
Provider's profile picture present (y/n)	0.296*** (0.046)	0.071 (0.095)	0.325*** (0.039)	0.325*** (0.066)
Product photo present (y/n)	0.251*** (0.029)	0.241*** (0.031)	0.096*** (0.022)	0.096*** (0.022)
Number of words in the meal description ^b	0.415*** (0.062)	0.429*** (0.054)	0.561*** (0.077)	0.584*** (0.065)
Number of words in the provider's profile description ^b	0.074 (0.049)	0.063 (0.032)	0.250*** (0.059)	0.246*** (0.055)
Degree of happiness in provider's profile picture	0.300*** (0.056)	0.294*** (0.056)	-0.124** (0.046)	-0.126** (0.046)
Meal price	0.068*** (0.013)	0.067*** (0.013)		
Mean standardized income per household	0.003 (0.005)	0.003 (0.005)	0.024*** (0.004)	0.024*** (0.004)
Ratio of offerings per households	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)	0.001*** (0.000)
Number of households	0.083*** (0.008)	0.081*** (0.008)	0.039*** (0.007)	0.039*** (0.007)
Number of months meal offered	-0.019*** (0.002)	-0.020*** (0.002)	0.004*** (0.001)	0.004*** (0.001)
Meal successfully shared (y/n)			0.074*** (0.012)	0.074*** (0.012)
<i>Interaction effects</i>				
Profile picture * Number of thank you notes (log) ^{a,c}		0.073* (0.035)		0.002 (0.020)
Number of words in a profile description ^{a,b} * Number of thank you notes (log) ^a		-0.037*** (0.008)		-0.002 (0.003)
Product picture * Number of thank you notes (log) ^{a,c}		0.038* (0.017)		-0.012 (0.011)
Number of words in a product description ^{a,b} * Number of thank you notes (log) ^a		-0.014 (0.038)		-0.027 (0.034)
Constant	-1.559*** (0.150)	-1.145*** (0.176)	3.025*** (0.108)	3.024*** (0.124)
Level 1: Provider	1.302*** (0.052)	1.273*** (0.050)	0.254*** (0.014)	0.255*** (0.014)
Residual			-0.107** (0.037)	-0.108** (0.037)
Observations	163,401	163,401	163,401	163,401
Number of providers	8,355	8,355	8,355	8,355

Notes: ^a Variables are grand mean centred. ^b Variables are divided by 100. Robust standard errors in parentheses. ^c The presence of a picture is the reference category.

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

& Bosker, 2012). With such samples, the clustering of data is an extra source of variation and should be taken into account (Snijders & Bosker, 2012). When analysing the successfulness of meals, it is important to consider that meals are nested within providers and that these scores are not independent. We therefore used multilevel modelling techniques to draw appropriate inferences and conclusions.

For the second hypothesis, a multilevel linear regression model was used with the price of a meal as the dependent variable. For both models, the same control variables were included, except that, for the first model, price was included as a control variable, and, for the second model, a successfully shared meal was included as a control variable. For ease of interpretation, we grand mean centred the number of thank you notes and the number of words in the profile and product description in our analyses.

Our model estimations were performed using Stata 13 (StataCorp LP, 2013).

RESULTS

Table 3.2 shows the regression model estimations for the analyses of the influence of reputation on the probability of successfully sharing a meal and on the meal price, and the various control variables.

Test of Hypotheses

The results of Model 1 show that the number of thank you notes positively affects the probability of successfully sharing a meal ($b = 0.103$, $p = 0.001$); this indicates that an increase in the number of thank you notes positively influences the likelihood of selling a meal. The coefficient for the number of thank you notes is 0.103, meaning that, for a one-unit increase in the number of thank you notes (log), we expect a 0.103 increase in the log-odds of the probability of a meal being sold, holding all other independent variables constant. This finding supports H1.

Our second hypothesis stated that reputation positively influences the price of a meal. According to Model 3, the number of thank you notes indeed has a positive effect on meal price ($b = 0.090$, $p = 0.001$). So, if the number of thank you notes increases by factor 10, the meal price increases by $[\exp(0.090 \times \ln(10)) - 1] = 0.23$ euro. Although this might be a minor increase in price, the reputation effect is economically significant. These results clearly confirm H2.

According to hypothesis H3a, we would expect a negative moderating effect between the number of thank you notes and the presence of a profile picture. Model 2 shows that the moderating effect is significant ($b = 0.073$, $p = 0.037$),

indicating that indeed the reputation effect on the probability of sharing a meal is greater when a provider does not have a profile picture than when he does; therefore, H3a is supported. The moderating effect on the price of a meal (Model 4) was not significant ($b = 0.002$, $p = 0.932$), thereby showing no support for H3b.

Hypothesis 4a claimed a negative moderating effect between the number of thank you notes and the number of words in a provider's profile description on the probability of sharing a meal. The findings (Model 2) show that the moderating effect is significant ($b = -0.037$, $p = 0.001$), meaning that the effect of reputation on the probability of sharing a meal is greater when a provider has fewer words in his or her profile description. These findings show support for H4a. The moderating effect on the price of a meal (Model 4) was not significant ($b = -0.002$, $p = 0.582$), thereby not supporting H4b.

According to Model 2, a significant moderating effect was found between the number of thank you notes and the presence of a product photo on the probability of sharing ($b = 0.038$, $p = 0.023$); thus, H5a is supported. No significant moderating effect was found for the number of thank you notes and a product photo ($b = -0.012$, $p = 0.247$) on the price of a meal (see also Model 4). Hence, H5b is not supported.

Lastly, no significant moderating effects were found between the number of thank you notes and the number of words in a product description for successfully sharing a meal ($b = -0.014$, $p = 0.709$) and for the price of a meal ($b = -0.027$, $p = 0.423$). Consequently, neither H6a nor H6b is supported. Summarizing, there is quite some evidence that the effect of thank you notes on the probability of sharing a meal is moderated by product and profile information, which is also able to create trust, but such moderating effects are not found on price. We return to this in the discussion.

In both regression models, we accounted for several control variables. The coefficients of the control variables across analyses point in the expected direction.

Discussion

Reputation is often referred to as “the new currency” in the sharing economy (Botsman, 2012), as it is effective in building trust between strangers (Tadelis, 2016). However, in socially driven exchanges one could expect that reputation might become superfluous for developing trust because trust can be developed, for example, through prosocial norms and values. Because most studies have investigated the effect of reputation on trust in an economically driven exchange setting, it remained unclear whether reputation builds trust in a social context. Insight into the working of reputation in socially driven exchanges furthers our theoretical understanding of how reputation operates under different exchange conditions. To study the effect of reputation on trust in a socially driven exchange

setting, we used longitudinal data from the meal sharing platform, SYM. From regression analyses, we found that reputation largely influences trust similarly as observed in economically driven exchanges. In that respect, SYM's reputation system follows what is referred to as Yhprum's Law (Yhprum is Murphy spelled backward) and can be interpreted as "systems that shouldn't work sometimes do, or at least work fairly well" (Resnick, Zeckhauser, Swanson, & Lockwood, 2004, p. 29).

First, we found that reputation, operationalized through the number of thank you notes received by a provider, had a positive significant influence on a consumer's decision to buy a meal (support for H1). These results indicate that the more thank you notes received by a provider, the higher the probability of sharing a meal. This finding is consistent with those of other studies showing that reputation influences consumer choice (e.g. Przepiorka et al., 2017; Resnick et al., 2004; Shapiro, 1983)). This finding also corresponds with uncertainty reduction theory, which states that people actively seek to reduce feelings of uncertainty by seeking as much information as possible about the other person (Berger & Calabrese, 1975). The availability of the number of thank you notes might be interpreted by consumers as useful information that they can use to reduce their uncertainty regarding the provider and the meal.

Second, we found a positive effect of reputation on the meal price (support for H2). This suggests that high-reputation providers can benefit from their accumulated reputation by raising their prices. This finding is consonant with empirical findings in the reputation literature. For example, Houser and Wooders (2006) found that seller reputation in eBay auctions has a positive influence on the final auction price. In a sharing economy context also, it was found that a provider's reputation has a positive influence on an Airbnb listing price (Teubner, Hawlitschek, & Dann, 2017).

Furthermore, this study found significant moderating effects between reputation and the presence of a profile and product picture and the number of words used in a provider's profile description on the probability of sharing a meal (support for H3a, H4a, and H5a). These results provide evidence of an *information effect*, i.e. information cues relating to a provider and the product can reduce a consumer's uncertainty about buying a meal and consequently reduces the need for reputation. Thus far, a moderating effect of a profile picture on the relation between reputation and trustworthiness has been demonstrated in an experiment by Xu (2014). Our study proves, based on actual transaction data, that this effect is present. On the other hand, no moderating effects were found between reputation, a profile and product picture, and the number of words in a product description on the price of a meal (no support for H3b, H4b, H5b, and H6b). A moderating effect between reputation and the number of words in a product description on the probability of sharing a meal was not found either

(H6a). These findings suggest that the information effect is primarily observed in actual purchasing behaviour rather than through the product price. We can only speculate about reasons why these moderating effects are found for sharing probability and not for price, but further research should dive deeper into this. One reason might be that, in SYM, for one dependent variable (successful sharing of a meal) one information effect (e.g. the presence of a profile picture) is sufficient for a customer to buy a meal from a provider; on the other hand, no information effect on willingness to pay more was found in this study. Perhaps additional signals would be required to trigger this information effect for price.

Implications

The present study has revealed that reputation is an effective mechanism for promoting trust in markets that facilitate socially driven exchanges. This fits in with Kreps et al.'s (1982) economic framework whereby buyers form trusting beliefs about sellers based on their observation of past transactions. Although sharing platforms contain social aspects and trust might develop along those lines, formal trust measures, such as reputation, are still relevant in creating trust. The findings provide support for the premise that trust building in socially driven exchanges in the sharing economy cannot be differentiated per se from that in economically driven exchanges. Reputation can also be relevant in more socially driven types of exchange.

From this study, we identify three managerial implications. First, platforms that facilitate socially driven exchange but do not have a reputation system can still improve the willingness of consumers to transact by implementing one. It has been shown that consumers use reputation, even in a rudimentary form such as the number of thank you notes, to inform their buying decisions. This could mean that using reputation could increase the number of transactions between existing users and attract new users, because reputation can contribute to reducing information asymmetry. In the case of SYM, an increase in transactions could result in the enhancement of social sustainability in neighbourhoods through increased social interactions. Second, providers in sharing markets are advised to pay attention to their profile on the platform. Our study has shown that consumers pay attention to a provider's reputation in their purchasing decision. In order to be successful in sharing, a provider's reputation does matter. This message can also be communicated by platform owners to providers, because more sharing contributes to the success of the platform. Moreover, given the information effect, providers are advised to invest in their profile when they do not have much reputation (yet). It has been shown that reputation matters less in the presence of profile information, such as profiles or product photos and extensive profile or product descriptions. Lastly, consumers on sharing platforms can be actively asked to rate providers and leave feedback on sharing platforms in order to help future consumers in making a buying decision.

Limitations and Directions for Future Research

As with every study, we encountered limitations that should be addressed in future research. First, our measure of reputation did not include the possibility of sanctioning; this makes it less comparable with other platforms that have implemented a sanctioning system, such as a 5-star rating system (e.g. Airbnb). Sanctioning, in our case, would be somewhat possible by not thanking a provider at all, and this would make it more comparable. The number of thank you notes, nonetheless, does inform potential consumers about satisfied consumers that shared a meal with the provider in the past and thus can form a base from which to infer future behaviour. Second, we assumed that the exchange between providers and consumers on SYM can be characterized as a socially driven exchange. However, we cannot be completely certain that the exchange is indeed entirely social, because we did not measure this explicitly. It could be that exchanges on SYM are more economically driven, although SYM exhibits many characteristics that seem to provide for a socially driven exchange. We therefore suggest measuring the type of exchange on sharing platforms to ascertain which exchange type fits best.

Given our research findings, work on the application of reputation in the sharing economy is still necessary. To foster trust between participants on sharing platforms, the inclusion of reputation would be advisable. However, the question still remains as to how a reputation system for sharing markets should be designed. In the SYM case, reputation is also a sign of affect, and it was an explicit design choice of the platform owner not to include a sanctioning option. It remains to be seen whether a reputation system including sanctioning, like the one on eBay, would work better for SYM. Having a reputation system based on control and sanctioning could possibly hurt the sense of community and consequently participation on the platform. Therefore, the nature of the platform and type of exchange should be taken into account in designing an effective reputation system.

CONCLUSION

Reputation is par excellence a mechanism that promotes trust and cooperation in economically driven exchanges, but this need not apply for socially driven exchanges. However, our results show that a provider's reputation is relevant to purchasing decisions and to setting the product price in a meal sharing market. This study illustrates that reputation can be relevant in creating trust in socially driven exchanges as well as in economically driven exchanges.

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PROMOTING TRUST THROUGH LINGUISTIC FEATURES OF PROVIDER PROFILES IN THE SHARING ECONOMY

This chapter is submitted to an international scientific journal. Ter Huurne wrote this chapter and conducted the analyses. Buskens, Corten, Moons and Ronteltap provided feedback on the design of the study, assisted with the analyses and provided feedback on earlier versions of the manuscript. Cite as: ter Huurne, M., Moons, J., Ronteltap, A., Corten, R., & Buskens, V. (2018). *Promoting Trust through Linguistic Features of Provider Profiles in the Sharing Economy*. (Working Paper). <https://doi.org/10.31219/osf.io/j9sk5>

ABSTRACT

Trust between providers and consumers in the sharing economy is crucial to complete transactions successfully. From a consumer's perspective, a provider's profile is an important source of information for judging trustworthiness, because it contains multiple trust cues. However, the effect of a provider's self-description on perceived trustworthiness is still poorly understood. We examine how the linguistic features of a provider's self-description predict perceived trustworthiness. To determine the perceived trustworthiness of 259 profiles, 188 real consumers on a Dutch sharing platform rated these profiles for trustworthiness. The results show that profiles were perceived as more trustworthy if they contained more words, more words related to cooking, and more words related to positive emotions. Also, a profile's perceived trustworthiness score correlated positively with the provider's actual sales performance. These findings indicate that a provider's self-description is a relevant signal to consumers, even though it seems easy to fake.

INTRODUCTION

The sharing economy is viewed as one of the most important economic developments of the last decade, and is associated with environmental, economic, and social gains (Frenken, 2017; Frenken & Schor, 2017). It is characterized by a mode of consumption where consumers share underutilized resources with one another via online platforms. Its popularity can be derived from the spectacular rise of companies such as Airbnb and Blablacar (with an estimated value of \$31 billion and \$1.6 billion, respectively (CNBC, 2017; Fortune, 2015)). However, consuming in the sharing economy is not without risks. Guests on Airbnb, for example, can be confronted with disappointing accommodation or unreliable hosts. Solving these issues with the intervention of Airbnb seems to be rather difficult⁹; this is characteristic of the regulatory uncertainty and consumer protection issues of the sharing economy as a whole (Katz, 2015; Ranchordás, 2015). These institutional uncertainties can seriously hamper trust, possibly leading to a decrease in willingness to participate in the sharing economy (Hawlitschek, Teubner, & Gimpel, 2016). Thus, trust of consumers in providers, as well as trustworthy behaviour of providers, are considered to be key challenges in transactions (Horton & Zeckhauser, 2016; Y. Kim & Peterson, 2017; J. Wu, Ma, & Zeng, 2016). In this paper we focus on the trust of consumers in providers; in other words, the perceived trustworthiness of providers for consumers.

From a consumer's perspective, one of the main sources for estimating a provider's trustworthiness is a provider's online profile page. It contains multiple important trust cues, such as reputation scores, a profile picture, and a textual self-description. Self-descriptions are important, because they provide information in a situation where it is scarce, and they form a gateway for future face-to-face interaction (Ellison, Hancock, & Toma, 2012). Also, they offer a stage for self-presentation, and for the promotion of the product or services being sold. However, providers can behave opportunistically, leading to inaccurate and selective self-descriptions, making their trustworthiness questionable. Nonetheless, we know that self-descriptions convey a particular, intended or unintended, impression of the provider (D. C. Evans, Gosling, & Carroll, 2008), and that self-descriptions are used by perceivers in online contexts to assess someone's trustworthiness (Larrimore, Jiang, Larrimore, Markowitz, & Gorski, 2011; Toma & Hancock, 2012).

Linguistic features have been shown to influence perceptions of trustworthiness when people write about themselves (Larrimore et al., 2011; Toma & D'Angelo, 2014). Language use can say something about a person's psychological needs (Toma & D'Angelo, 2014), and is therefore used by readers to infer trustworthiness

⁹ For examples of stories of dissatisfied Airbnb users, see www.airbnbhell.com

(Larrimore et al., 2011; Rodriguez, Holleran, & Mehl, 2010). For instance, the number of words in an online dating profile influences users' judgement of a dater's trustworthiness; specifically, profiles with shorter descriptions are perceived as more deceptive than longer profiles (Toma & Hancock, 2012). This can be explained by the fact that these profiles contain fewer details.

Most studies related to reducing consumer uncertainty in the sharing economy investigated uncertainty reduction mechanisms, such as reputation, the use of profile pictures, and reviews (e.g. Bente et al., 2012; Ert et al., 2016; Fagerstrøm et al., 2017), leaving the effect of linguistic features underexposed. For a rare exception, see Ma et al. (2017), who found that linguistic features affect perceived trustworthiness in the context of a lodging platform. Therefore, it remains unclear whether linguistic features are effective in promoting trust; and more specifically, which particular mechanisms are used by consumers to reduce their uncertainty about the trustworthiness of providers. Additionally, researching the effect of linguistic features could provide insights into the uncertainty reduction process, which may be extended to other online markets.

The aim of this study is to investigate specific mechanisms that consumers use to infer perceived trustworthiness of providers in the sharing economy. The central research question is: *What linguistic features of providers' profile text predict perceived trustworthiness in the sharing economy?* Besides this central aim, we explore whether trustworthiness perceptions extend to actual behaviour by investigating the effect of these perceptions on sales performance.

We tested the effects of providers' profile descriptions in the context of one of the largest sharing platforms of the Netherlands, Shareyourmeal (SYM).¹⁰ SYM is a platform on which people can share meals with people in their neighbourhood. It has attracted 14,971 providers and 94,110 consumers since its inception in 2012. We asked actual consumers on the platform to judge provider profile descriptions on trustworthiness. Text analysis software (Linguistic Inquiry and Word Count: LIWC) was used to analyse specific linguistic features of the profile descriptions. To determine the influence of the linguistic features on the perceived trustworthiness scores of the providers' profiles, we used cross-classified mixed effects modelling.

First, we provide a background of the relevant theoretical concepts, after which hypotheses are formulated. This is followed by a description of the empirical context of the study, and the study design. We then present the results, and subsequently, conclusions and implications for both theory and practice are presented in the final section.

¹⁰ The Dutch name is Thuisafgehaald, www.thuisafgehaald.nl

BACKGROUND

The term sharing economy is used as an umbrella term for many platforms that enable online peer-to-peer exchanges of underutilized resources. The sharing economy covers a vast domain that, according to Botsman and Rogers (2010), incorporates different consumption systems, i.e. product service systems (e.g. Airbnb), redistribution markets (e.g. the Freecycle Network), and collaborative lifestyles (e.g. Taskrabbit). Although there is no agreement on how to exactly define the sharing economy (Botsman, 2013), we define the sharing economy as “an economic model based on sharing underutilized assets between peers without the transfer of ownership, ranging from spaces, to skills, to stuff, for monetary or non-monetary benefits via an online mediated platform” (ter Huurne et al., 2017, p. 2). This definition stresses the fact that underutilized resources are shared online; this sets it apart from the broader field of e-commerce, where resources do not have to be underutilized per se, and ownership transfers from providers to consumers.

Trust is generally recognized as a key ingredient for participating in, and successfully completing transactions in, the sharing economy (Hawlitschek, Teubner, & Gimpel, 2016; Tussyadiah, 2016). According to Möhlmann (2016), trust in the sharing economy needs to be differentiated from trust in other economic exchanges for four reasons. First, transactions are performed in a triad of relationships, namely, between peers, platforms, and underutilized products, resulting in three targets of trust. Trust in peers is influenced by the belief that the supplying individual has the competencies to fulfil his/her part of the transaction, as well as being a benevolent and honest person. Also, trust in peers is shaped by the expectation that the consuming peer will handle shared products with care and act with the provider's interest in mind. Trust in the product is understood as the product being reliable in the consumer's view, and initially has to be evaluated on virtual cues. Both the consumer and the provider need to have favourable trusting beliefs towards the platform. This implies that the platform is well-qualified to play a facilitating role in the transaction and is a reliable partner that, for example, deals honestly with privacy and security issues (Hawlitschek, Teubner, Adam, et al., 2016).

Second, transactions do not only occur online, but also have an offline component, making social aspects more relevant compared with transactions that exclusively take place online. Third, the use of products and services in the sharing economy is based on access to ownership (Hamari et al., 2015); this requires higher trust levels compared with peer-to-peer transactions with a transfer of ownership (e.g. eBay; see Hawlitschek, Teubner, Adam, et al., 2016). Lastly, it is often proposed that the sharing economy includes service-exchange activities (e.g. cleaning, offering taxi rides, and running errands; Botsman, 2013; Smolka & Hienerth,

2014); these are more complex activities than product-exchange, as they include many additional components (e.g. cleanliness, hospitality, and accuracy; see Möhlmann, 2016).

The Concept of Trust

Trust is a widely researched concept across various academic fields, such as psychology, sociology, and economics (Rousseau et al., 1998). Across disciplines, trust is considered to act on multiple levels (individual, interpersonal, and institutional), and risk and interdependence are suggested as necessary conditions for trust problems to arise (*ibid.*). Risk is the perceived probability of loss, which creates the need for trust to alleviate uncertainty. Interdependence refers to the situations in which the interests of one party cannot be served without reliance upon the other party (Rousseau et al., 1998). Trust is therefore considered to be a crucial instrument serving as a control and cooperation mechanism (Borgen, 2001).

In this study, we view trust from an interpersonal perspective, meaning that trust implies that a trustor has favourable beliefs about the characteristics of the trustee, and that the trustee will act according to the expectations of the trustor. Mayer et al. (1995, p. 715) define trust as “the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party.” In their review of trust, Mayer et al. (1995) present trust as a trait that leads to a generalized expectation of others, i.e. perceived trustworthiness. According to these authors, perceived trustworthiness is a multidimensional concept consisting of the dimensions *ability*, *benevolence*, and *integrity*. To trust in another’s ability is to hold the belief that another party possesses the skills, competencies, and characteristics to deliver certain outcomes. The concept of benevolence refers to the question of whether the trustee is believed to do good, and whether he/she acts in the best interest of the trustor; and integrity refers to the belief that the trustee adheres to a set of moral principles perceived as acceptable by the trustor (Mayer et al., 1995). For all three dimensions, consumers may experience uncertainty; different aspects of the provider’s profile might reduce uncertainty on each of these dimensions.

The development of trust is considered to progress in stages, such as initial trust and continuous trust (Lewicki & Bunker, 1996; K. Wu, Vassileva, Zhao, Zhu, & Fang, 2014). These stages vary in the level of familiarity between the parties involved, and consequently the amount of information that is available about each other (McKnight, Kacmar, & Choudhury, 2004). Parties who are familiar with each other possess reliable information about each other, whereas unfamiliar parties do not. In the latter case, trust (or initial trust) is based on whatever information is available, and inferences are based on that (Meyerson, Weick, & Kramer, 1996).

Most first-time transactions in the sharing economy take place in the initial trust stage, because a consumer has limited information about the trustworthiness of a provider, and is thus faced with a situation of information asymmetry (a situation where one party possesses more information than the other).

To reduce this situation of information asymmetry, a consumer can resort to information sources available on a provider's online profile, such as reputation scores, a profile picture, feedback from other users, or a self-description. A provider's self-description is a valuable trust source, because it can be used to promote the provider's uniqueness to an assumed audience by displaying the provider's ability, benevolence, and integrity (Pera, Viglia, & Furlan, 2016). Nonetheless, online self-presentation is "more selective, malleable, and subject to self-censorship in computer-mediated communication than it is in face-to-face interaction" (Walther, 1996, p. 20), which makes it unsure whether consumers will use a provider's self-description to determine his or her trustworthiness.

Uncertainty Reduction Theory

Uncertainty can be understood through uncertainty reduction theory (URT) (Berger & Calabrese, 1975). URT focuses on the initial encounter between people prior to the actual communication process, and states that people actively seek to reduce feelings of uncertainty by acquiring as much information as possible about the other person. In doing so, people are able to predict each other's future attitudes and behaviour. URT formulates, among others, several non-verbal strategies to reduce uncertainty in interpersonal communication, such as eye contact, head nods, and physical distance between people. However, these strategies are not available in online settings, forcing individuals to resort to other information seeking strategies. Research into online dating, for example, has shown that participants use strategies such as asking questions via email, viewing photos and profile descriptions, and googling prospective dates (Gibbs, Ellison, & Lai, 2011).

To examine uncertainty reduction in the sharing economy, we investigated four mechanisms that are related to major sources of uncertainty in the online buying process, i.e. seller and product uncertainty (Dimoka, Hong, & Pavlou, 2012). Mechanisms that reduce seller uncertainty are seeking information about the provider (1), focusing on perceptions of a provider's ability (2), benevolence (3), and integrity (4) (Doney & Cannon, 1997; Jiang, Hoegg, Dahl, & Chattopadhyay, 2010; Standifird, 2001). Also, product uncertainty can be reduced through the information mechanism by having enough product information at one's disposal as well as detailed information which could help consumers to infer how products would perform in the future (Dimoka et al., 2012). Based on these mechanisms, we formulate and test hypotheses that predict the reduction of uncertainty in the online buying process through the use of linguistics.

HYPOTHESES

Language is called “the currency of most human social processes” because it conveys emotions, stories, and thoughts (C. Chung & Pennebaker, 2007, p. 343). In the process of developing trustworthiness, linguistics features have shown to be a useful marker in creating trusting beliefs (Ellison et al., 2012; Larrimore et al., 2011), because they can say something about the mental state of a person, as psychological processes are reflected in language use (Toma & D'Angelo, 2014). Toma & D'Angelo (2014) reason that perceivers experience psychological needs relating to the context (i.e. buying a quality meal) and the goals (i.e. assessing a provider's trustworthiness) of the task at hand and that they use linguistic cues to satisfy these needs.

General Information Richness

A frequently used strategy to reduce uncertainty between people in the online environment, is to increase the amount of information available (Dimoka et al., 2012; Toma & Hancock, 2012). For instance, Larrimore et al. (2011) found that in the context of an online peer-to-peer lending platform, the number of words in a lending request is a significant predictor of funding success. A longer lending request generally contains more information, and this could lead to reducing the uncertainty of a potential borrower. Since longer descriptions appear to be effective in increasing trust in online environments, we believe that this also applies to SYM. One of the primary concerns of a consumer on SYM, is whether a provider is able to prepare a tasty meal. More information provided by the provider could help reduce a consumer's uncertainty, if this information elaborated on the provider's cooking abilities.

Furthermore, experts might use lengthier descriptions than novices, as was shown in the case of wine tasting, when describing smells and flavours (Croijmans & Majid, 2016). Wine experts tend to possess a greater lexicon for describing wines and engage more often in talking about wine; this allows them to express themselves in many different ways (*ibid.*). This might also be the case for SYM, in the sense that an expert provider could be identified by the number of words used to describe his/her offerings. Finally, a lengthier description might also provide additional cues on the benevolence and integrity of the provider assuming that providers will not explicitly provide suggestions for the opposite. Consequently, we propose the following hypothesis:

H1: The more words a provider's profile contains, the more the provider is perceived as trustworthy.

Ability

An essential component of perceived trustworthiness is the perception that a person possesses skills, competencies, and characteristics in a certain domain (Mayer et al., 1995). Mayer et al. (1995) view perceived expertise as an integral part of ability. On SYM, providers can show their expertise by providing very concrete descriptions of their products, cooking skills, techniques, and use of ingredients.

We reason that more concrete and specific information provided by a provider reduces a consumer's uncertainty, and enhances the consumer's trust in acquiring a quality meal. One might even claim that while more words are rather easily added to a profile, really concrete text showing cooking skills are less easily produced if you are not an expert. Thus, more concrete information in a provider's profile is likely to increase a consumer's trust in the quality of a meal. This will improve the perceived trustworthiness of the provider.

We use two linguistic dimensions as indicators of concreteness, i.e. articles (e.g. 'a', and 'the') and prepositions (e.g. 'in', 'at') (Larrimore et al., 2011; Toma & D'Angelo, 2014). According to Tausczik and Pennebaker (2010) articles and prepositions often indicate concrete information about a topic, because these dimensions signal the presence of a concrete noun. For example: *The keys are in the box by the lamp under the painting*. Based on the above reasoning, we assume that concreteness predicts perceived trustworthiness and hypothesize that:

H2: The more words related to concreteness an online profile contains, the more the provider is perceived as trustworthy.

In addition, we predict that consumers appreciate the expertise of providers specifically when they use cooking-related words, such as 'baking', 'homemade', and 'healthy'. Therefore, we hypothesize that the use of cooking-related words predicts the perceived trustworthiness of a provider.

H3: The more words related to cooking an online profile contains, the more the provider is perceived as trustworthy.

Benevolence and Integrity

A benevolent provider would take the interests of the consumer into account and would not be perceived as opportunistic (McKnight & Chervany, 2001). Unfamiliarity between consumers and providers in online marketplaces, provides for an anonymous environment, which makes trading an impersonal activity (Diekmann et al., 2014). This hampers relationship building between transaction partners, and consequently, the development of a consumer's trusting beliefs about a provider's benevolence.

One way to strengthen the relationship between the agents involved in a transaction, is through social connection. From a linguistic point of view, second-person pronouns are relevant to social connections and create consumer involvement (Cruz, Leonhardt, & Pezzuti, 2017). Chung and Pennebaker (2007) propose that the use of second-person pronouns (e.g. 'you', 'your', 'yourself') suggests that the person cares for other people. Moreover, second-person pronouns invite readers to join and engage in the conversation, thus reducing the impersonality of communication (Pollach, 2005). Or as Hyland (2005, p. 359) states: "*you* is the most interactive device in the writer's repertoire as it explicitly acknowledges the reader's presence" (e.g. *Your* preferences are important to me).

Therefore, we consider the second-person pronouns (singular and plural; e.g. 'you', 'your', 'yours') as an indicator for building social connections and as a predictor for perceived trustworthiness. Consequently, providers who use many second-person pronouns in their profile are expected to convey higher levels of benevolence towards the consumer. They are expected to be perceived as more trustworthy than providers who use few second-person pronouns. We thus hypothesize that:

H4: The more words expressing social connections an online profile contains, the more the provider is perceived as trustworthy.

In the early stages of creating trust, conveying enthusiasm is important because it contributes to a good first impression (Jarvenpaa & Leidner, 2006). In the case of a salesperson, enthusiasm can be displayed by performing sales duties with eagerness, a positive attitude, and/or a high level of energy (Weilbaker, 1990). It is considered one of multiple relationship traits that are predictive of salespeople's performance (Anselmi & Zemanek, 1997). Enthusiasm can influence one's likeability (Oksenberg, Coleman, & Cannell, 1986), and likeable salespeople are more likely to be approached by a consumer (Wood, Boles, & Babin, 2008). Also, likeability was found to be positively related to the degree someone is trusted by others (Rotter, 1980). These perceptions of trust could be evoked by the intentionality process: consumers attribute integrity to those they like (Doney & Cannon, 1997). The provider appears motivated to deliver a good product, and thus seems less likely to optimize short term monetary gains at the expense of product quality.

Moreover, a provider's enthusiasm is relevant for consumers, because it increases their satisfaction with the transaction. Consumers perceive enthusiasm as desirable and praiseworthy, leading them to experience positive emotions as well (S. Lee & Dubinsky, 2003). In the SYM case, we think that consumers will appreciate enthusiasm displayed by a provider, and that this will be translated into favourable trusting beliefs about the provider. We reason that providers

who express a high level of enthusiasm in their self-description are perceived as more trustworthy. Consequently, we hypothesize the following:

H5: The more words related to enthusiasm an online profile contains, the more the provider is perceived as trustworthy.

Perceived Trustworthiness Effect on Sales Performance

A crucial question is whether a provider's perceived trustworthiness translates into sales. Should a provider care about his/her perceived trustworthiness (as derived from his/her profile text) or is it a factor that can be ignored? The answer to this question could be of importance to a provider's success and might have implications for his/her self-promotion strategy. The relation between perceived trustworthiness and trusting behaviour was also found in a choice experiment by Ma et al. (2017), which showed that perceived trustworthiness indeed predicted a participant's choice of an Airbnb listing. On SYM, a consumer would proceed to buy a meal if he perceived the provider as trustworthy. Therefore, we hypothesize the following:

H6: The perceived trustworthiness score of a provider's profile text is positively associated with his/her sales performance.

Figure 4.1 displays the determinants of perceived trustworthiness through the lens of uncertainty reduction theory, and the underlying hypothesised relations.

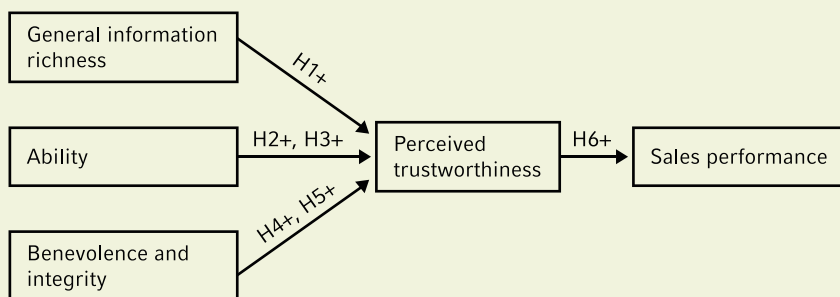


Figure 4.1. The Research Model.

STUDY DESIGN

The design of our study consists of several parts: the empirical context, the development of the measurement instrument, the procedure of administering the survey, the characteristics of the final survey, the text analysis procedure, and the statistical approach used. All these elements will be described respectively.

Empirical Context

trustworthiness items, translated into Dutch, and adapted to the current context. The scale consists of three dimensions: ability (4 items), benevolence (5 items), and integrity (4 items), on a 5-point Likert scale ranging from 1 ("disagree strongly") to 5 ("agree strongly"). Using these items, 12 participants (university colleagues) rated a random selection of 20 real SYM provider profiles via an online survey.

Although, we have theoretical arguments that some linguistic variables have predominantly effects of specific subdimensions of trust, the restriction on the size of the questionnaire were such that we could not include enough items to measure each subdimension reliably. Therefore, we focus on one scale for perceived trustworthiness. To select the items that were most apt, Cronbach's alpha (α) per construct and the average Intraclass Correlation (ICC) per item were calculated. We selected per construct two items that together had the highest α . Additionally, we checked whether the ICC score per item was ≥ 0.60 to ensure a sufficient level of agreement between raters (Cicchetti, 1994). The Cronbach's α for ability was 0.97, for benevolence 0.98, and for integrity 0.93. The Cronbach's α for the complete perceived trustworthiness scale was 0.97. All these values were above the suggested threshold of 0.80 (Hair, Black, Babin, & Anderson, 1998). The selected perceived trustworthiness items are presented in Table 4.1.

Table 4.1. Perceived Trustworthiness Items Used in the Main Study

Dimension	Item
Ability	I feel very confident about the cook's skills.
Ability	The cook has a lot of knowledge about cooking.
Benevolence	My needs and desires are very important to the cook.
Benevolence	The cook will go out of his/her way to help me.
Integrity	I can assume that this cook acts honestly.
Integrity	I never have to wonder whether the cook will stick to his/her word.

Procedure

Actual SYM providers' self-descriptions were shown in isolation and rated by actual SYM consumers. SYM provided us with a dataset containing all transactions between providers and consumers from the start of SYM in March 2012 to December 2016. The dataset also contained the profile information of 10,619 providers. Only profiles that had self-descriptions containing 20 words or more were included in the sampling pool (to ensure a minimum amount of text to be analysed), leaving a total of 5,582 profiles.

A preliminary power analysis led to the random selection of 400 profiles to be rated. Of those, 200 profiles were of providers who had never sold a meal, and 200 profiles were of providers who had sold one meal or more. We did this in order to investigate a possible relation between perceived trustworthiness and sales performance.

Email invitations to participate in the online survey were sent out to 7,965 actual SYM consumers and 10 small gifts were offered via a random lottery to increase participation. The profiles were presented in a pseudo-random order to the participants. The response rate during the study was lower than expected (2.54%); this necessitated a step in which we excluded those profiles from further analysis that were not yet frequently rated. In total, 203 respondents completed the survey.

To take into account the possibility of careless response, we excluded those respondents who selected the same response category for 52 or more items (out of 60). This cut-off was chosen post-hoc because it showed a clear separation into two clusters of respondents. This procedure resulted in a final total of 259 profiles with five ratings or more ($M = 7.3$, $SD = 2.5$), rated by 188 respondents. We performed an interrater reliability analysis using the percentage of agreement and Gwet's AC1 statistic to determine consistency among raters.¹¹ The raters agreed 90.42% of the time, and the interrater reliability was found to be Gwet's $AC1 = 0.71$ ($p = 0.001$), 95% CI (0.681, 0.736), which may be considered "substantial agreement" (Landis and Koch, 1977, p. 165).

Because the response rate to the online survey was unexpectedly low (2.54%), this could cause a response bias. To verify whether our sample resembles the SYM user population, we compared it with the earlier Stipo (2015) study on SYM users, because SYM does not keep a record of its users' demographics. This study reported a distribution of 25% male consumers, which corresponds to the percentage that we found (27.66%). Also, the respondents' age distribution of our study matches that of earlier research carried out by SYM (Shareyourmeal, 2015). Comparison of the sample characteristics with SYM population data reveals large similarities, indicating that the results may be generalisable.

Characteristics of the Survey

Perceived trustworthiness was examined using the items from the pre-test on a 7-point Likert-type scale, to allow for sufficient scale sensitivity. To control for demographic variables, participants were asked to state their sex, age, and education. We also asked whether respondents recognized one or more profiles, to account for possible familiarity of the respondent with a profile. Additionally, we controlled for misspellings. Misspellings have been shown to influence perceptions in online profiles (Gibbs et al., 2006; Scott et al., 2014) and should therefore be taken into account. To determine the number of misspellings per profile, we used the Dutch dictionary OpenTaal (version 2.00G). In the analysis, we included the proportion of misspellings relative to the number of words in a

¹¹ We used Gwet's AC1 statistic, because ratings were unevenly distributed and agreement was high leading to low values of Cohen's Kappa and Fleiss' Kappa, known as *the paradox of Kappa* (Cicchetti & Feinstein, 1990). Gwet's AC1 is a paradox-resistant alternative agreement coefficient to remediate this issue (Gwet, 2016).

profile. Lastly, respondents' disposition to trust was measured, because research has shown it to be a significant determinant of trusting beliefs in the online environment (Gefen, 2002; McKnight, Choudhury, & Kacmar, 2002). Disposition to trust was measured using three items adapted from Yamagishi and Yamagishi (1994) well-established scale. Table 4.2 shows the descriptive statistics of the demographic and control variables included in the study.

Table 4.2. Respondents Descriptive Statistics

Dimension		Number	%	Mean	SD
Sex	Male	52	27.66	55.04	13.86
	Female	136	72.34		
Age					
Educational level	No diploma	2	1.06	55.04	13.86
	Elementary school	1	0.53		
	Lower vocational education	8	4.26		
	Higher general continued education	24	12.77		
	Preparatory middle-level applied education	9	4.79		
	Middle-level applied education	20	10.64		
	Higher-level applied education	71	37.77		
	University	53	28.19		
Disposition to trust (7-point Likert-type scale)	Most people are reliable			5.24	1.13
	Most people are honest			5.07	1.12
	Most people are of good faith			5.12	1.26
Number of profiles recognized	0		82.54%		
	1		2.65%		
	2		3.70%		
	3+		11.11%		

Text Analysis Procedure

To determine the specific linguistic features of the provider's profile that influence perceived trustworthiness, we used the text analysis program LIWC (Pennebaker, Booth, & Francis, 2007). LIWC is a validated tool to measure psychological dimensions in texts. It counts the number and percentage of words in texts and classifies them into various syntactical and semantic categories. LIWC analyses linguistic content against an internal dictionary containing 90 output variables, grouped by categories and subcategories (e.g. standard linguistic dimensions, summary language variables, word categories tapping psychological constructs).

The Dutch LIWC dictionary 2007 (developed by Zijlstra, van Meerveld, & van Middendorp, 2004) was used to analyse the providers' self-descriptions. To analyse the linguistic features related to cooking, we developed a customized

cooking dictionary. It was developed by two researchers who, independently of each other, selected words related to cooking based on all profiles used in this study. The results of both researchers were compared; words on which agreement was reached were included in the dictionary. Agreement was reached in 95% of all cases. In the event of disagreement, a third researcher decided whether to include a specific word or not. Table 4.3 shows the LIWC categories used in relation to the formulated hypotheses, Table 4.4 provides descriptive statistics of the linguistic features, and Table 4.5 demonstrates the correlations between the linguistic features included in the study.

Table 4.3. Hypotheses and Examples of Words in Each LIWC Category

Hypothesis	LIWC category	Examples
H1: more words	Word count	N/A
H2: words relating to concreteness	Articles	'the', 'a', 'an'
	Prepositions	'on', 'under', 'in'
H3: words relating to expertise	Cooking-related words*	'baking', 'organic', 'homemade'
H4: words expressing social connections	You	'you', 'your', 'yours'
H5: words relating to enthusiasm	Positive emotions	'humour', 'impressive', 'interesting'

Note: * = This linguistic category is not part of the standard LIWC dictionary.

Table 4.4. Descriptive Statistics of Linguistic Features

Dimension	Linguistic feature	Example	# LIWC words	Mean %	SD %
Words captured by LIWC	Dictionary		6,551	67.11	10.37
General information richness	Word Count			58.17	49.9
Ability	Articles	'a', 'an', 'the'	3	5.41	3.46
	Prepositions	'on', 'under', 'in'	48	12.96	4.49
	Cooking words*	'baking', 'frying', 'durable'	560	15.55	9.11
Benevolence and integrity	You	'you', 'yours',	7	1.10	1.67
	Positive emotions	'happy', 'pretty', 'good'	690	3.04	2.87

Note: * = This linguistic category is not part of the standard LIWC dictionary.

Table 4.5. Correlation Matrix for Linguistic Features

	Trustworthiness	Word count	Articles	Prepositions	Cooking words	You	Positive emotions
Trustworthiness	1.00						
Word count	0.22	1.00					
Articles	-0.02	0.23	1.00				
Prepositions	0.02	0.06	0.17	1.00			
Cooking-related words	0.04	-0.18	-0.26	-0.19	1.00		
You	0.08	0.17	-0.04	-0.06	-0.22	1.00	
Positive emotions	0.03	-0.09	0.10	0.11	-0.12	-0.08	1.00

Analysis of Perceived Trustworthiness Effects on Sales Performance

To determine a providers' sales performance, we used SYM transaction data containing the number of meals sold per provider. Because of the skewness of these data, we applied a $^2\log$ transformation to this variable.

Because the dataset did not show whether a provider edited his/her profile, we assumed that a profile was constant over time. Subsequently, we used the perceived trustworthiness score of a profile to predict sales performance.

Statistical Procedure

Because of the cross-classified nature of the data (respondents rated multiple profiles and a profile is rated by multiple respondents), we applied cross-classified mixed effects modelling (Snijders & Bosker, 2012). The dependent variable in our model was the mean of the six perceived trustworthiness items per profile, because factor analysis of these items yielded only one factor; following Büttner and Göritz (2008), we chose a unidimensional approach to measure this construct. The perceived trustworthiness score can be denoted as $Y_{ij}(\cdot)_k$, referring to respondent i rating profile j , together forming the k th observation. The explanatory variables are the various LIWC categories and control variables ($X_{ij}(\cdot)\beta$), modelled by the respondent (e_i) and profile level (e_j), leaving a residual variance component (u_k). The random effects were assumed to be normally distributed. Consequently, the model can be denoted as:

$$Y_{ij}(\cdot)_k = X_{ij}(\cdot)\beta + e_{ik} + e_{jk} + u_k$$

The effects of linguistic features on perceived trustworthiness were assessed in different stages (see Table 4.6). First, a baseline model was evaluated to partition the variance components of the profile and the respondent. In preliminary cross-classified analyses, separate models were tested for LIWC categories and control variables. The results showed that these models did not explain additional variance compared with the baseline and the full model. Finally, the full model was run containing all LIWC categories and control variables. The analysis was conducted using Stata Statistical Software: Release 13.1 (StataCorp LP, 2013).

To analyse whether the perceived trustworthiness score of a profile predicted a provider's sales performance, we used linear regression on the log-transformed number of meals sold (Table 4.7). The predictor variable in this analysis was the profile's trustworthiness score, corrected for respondent bias. The control variables were omitted because they were measured at respondent level and the analysis was performed at profile level.

RESULTS

Table 4.6 shows the regression estimates for the influence of linguistic features on perceived trustworthiness.

Table 4.6. Cross-classified Analyses for Perceived Trustworthiness with Linguistic Features and Respondent Characteristics

	Empty model	Control variables only	Linguistic features only	Full model
<i>LIWC categories</i>				
Word count (log2)			0.367*** (0.032)	0.363*** (0.032)
Articles			-0.023** (0.009)	-0.019* (0.009)
Prepositions			0.017** (0.006)	0.018** (0.006)
Cooking			0.011*** (0.003)	0.010** (0.003)
You			0.026 (0.016)	0.029 (0.016)
Positive emotions			0.019* (0.009)	0.022* (0.009)
Sex		-0.073 (0.137)		-0.093 (0.138)
Age		-0.005 (0.005)		-0.005 (0.005)
Education		-0.152*** (0.044)		-0.159*** (0.044)
Number of recognized profiles		0.019 (0.041)		0.015 (0.042)
Disposition to trust		0.245*** (0.063)		0.240*** (0.064)
Misspellings		1.89* (0.868)		1.778* (0.726)
Intercept	4.663*** (0.071)	4.522*** (0.497)	2.281*** (0.219)	2.206*** (0.538)
<i>Random effects</i>				
Respondent level	0.746** (0.083)	0.614*** (0.070)	0.753 (0.084)	0.623*** (0.070)
Profile level	0.198*** (0.025)	0.197*** (0.025)	0.091 (0.016)	0.091*** (0.016)
Residual	0.506*** (0.020)	0.506*** (0.020)	0.506 (0.020)	0.506*** (0.020)
N ₁ (respondents)	188	188	188	188
N ₂ (profiles)	259	259	259	259

Note: Standard errors in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

The empty model explains how the total variance is divided between the variance components associated with the respondent and the profile level. The results show significant variance at the respondent level ($\sigma^2_i = 0.75$, standard error SE = 0.083) and at the profile level ($\sigma^2_j = 0.20$, SE = 0.025). These results justify the use of cross-classified models. The addition of the LIWC and control variables led to a small decrease in both variance components, i.e. for the respondent level ($\sigma^2_i = 0.62$, SE = 0.070) and for the profile level ($\sigma^2_j = 0.091$, SE = 0.016).

Our first hypothesis predicted that the more words a profile contains, the more the provider is perceived as trustworthy. For ease of interpretation, the category word count was transformed to a ²log variable (so that the regression coefficient can be interpreted as the effect of doubling the number of words). The number of words indeed seemed to be a positive and significant predictor of perceived trustworthiness ($b = 0.363$, $p = 0.001$); H1 is thus supported.

The second hypothesis predicted that words relating to a concrete description of an object would positively influence perceived trustworthiness. The results

showed that the use of articles had a negative effect ($b = -0.019$, $p = 0.024$), whereas the prepositions showed a positive effect on perceived trustworthiness ($b = 0.018$, $p = 0.003$). We found no consistent support for H2.

Our third hypothesis claimed that a provider's display of expertise in his/her profile through cooking-related words would increase his/her perceived trustworthiness. Indeed, using cooking-related words had a positive significant effect on perceived trustworthiness ($b = 0.010$, $p = 0.001$). Hence, H3 is also supported.

H4 stated that online profiles that use more words aimed at building social connections would increase perceived trustworthiness. Words related to this concept (e.g. 'you', 'yours') did not have a significant effect on perceived trustworthiness ($b = 0.029$, $p = 0.077$). H4 was therefore not supported.

The fifth hypothesis predicted that the use of positive emotions, as an indicator for enthusiasm, would lead to higher perceived trustworthiness. The use of positive emotions indeed had a positive significant effect ($b = 0.022$, $p = 0.015$). H5 is thus supported.

The sixth hypothesis stated that the perceived trustworthiness score of a provider's profile positively predicts his/her sales performance. We found that a profile's perceived trustworthiness score does have a positive effect on whether a provider sells a meal or not ($b = 0.688$, $p = 0.001$) (Table 4.7). Thus, the results support H6.¹²

Table 4.7. Linear Regression Analysis with Meals Sold (log, dependent variable) and Perceived Trustworthiness Score (independent variable)

Variables	
Perceived trustworthiness	0.688*** (0.175)
Constant	-2.071* (0.822)
Observations	251
R-squared	0.059

Note: Standard errors in parentheses. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

¹² Additionally, we explored whether the relation between linguistic features and trustworthiness is bounded. We chose word count, because it proved to have the largest significant regression coefficient. Unfortunately, 94.21% of our data has a word count smaller than 27 which makes it difficult to make statistical inferences. However, the outliers in our data suggest that the effect of word count on trustworthiness is limited, indicating that it is not effective to use an extremely large amount of words.

DISCUSSION

This study set out to determine whether consumers use linguistic features of providers' profile texts to reduce their uncertainty within the context of the sharing economy (specifically, on a meal-sharing platform). We found that linguistic features do matter when one is trying to form perceptions of trustworthiness in the sharing economy. Extending Ma et al.'s (2017) findings, our study illustrates that linguistic features contribute to perceived trustworthiness across different contexts, including the sharing economy. In addition, perceived trustworthiness appears to drive buying behaviour.

More specifically, we found that, in line with uncertainty reduction theory, offering more information by using more words has a positive effect on perceived trustworthiness. The effects of reducing uncertainty by using more concrete words (i.e. the use of articles and prepositions) are less straightforward. The use of articles had a significant and negative effect on perceived trustworthiness, whereas the use of prepositions was found to have a positive effect. Perhaps focusing on the presence of nouns, by counting articles and prepositions (Tausczik & Pennebaker, 2010) is not a very valid way of measuring the concreteness of text. Nouns per se are not concrete; they can have different degrees of concreteness (Pander Maat & Dekker, 2016). For example, words like 'stove', 'pan', and 'meat' are considered to be concrete words, whereas words such as 'additives' and 'cereal products' are seen as more abstract – yet, all are nouns. Our suggestion to improve the measurement of concreteness would be to build a dictionary in LIWC, containing a list of words denoted by experts as concrete (an example of such a dictionary is used by t-scan).¹³

Although SYM is a platform that aims to support social connections between people, socially oriented words (i.e. second-person pronouns) did not seem to influence a provider's perceived trustworthiness. Literature (e.g. Stirman & Pennebaker, 2001) indicates that first-person pronouns ('I') denote a focus on the self, while second-person pronouns (you) have a focus on the other person (C. Chung & Pennebaker, 2007). We expected this focus on the other to translate into higher levels of perceived trustworthiness, which did not happen. However, note that the use of second-person pronouns was relatively rare and highly variable (see Table 4.4). This makes it more difficult to find any effect on perceived trustworthiness.

Furthermore, expressing enthusiasm by means of words related to positive emotions (e.g. 'humour', 'to adore', 'to thank') did have a positive effect on perceived trustworthiness. Also, the use of cooking-related words (e.g. 'homemade',

¹³ T-scan is software for complexity analysis of Dutch texts (Pander Maat et al., 2014).

'ingredients', 'baking') had a positive significant effect, meaning that displaying expertise in one's profile is effective in raising perceived trustworthiness.

Next, we found a significantly positive effect of perceived trustworthiness on the actual sales performance of a provider. This indicates that perceived trustworthiness derived from a provider's profile text is an important factor that drives consumers' decisions; this concurs with earlier findings by Ert et al. (2016) and Ma et al. (2017) in the sharing economy.

This study has several theoretical and practical implications. On a theoretical level, our study adds to the comprehension of language use in online peer-to-peer transactions, and more specifically in the sharing economy. It shows that self-presentation in a profile text is important in the sharing economy, similar to other contexts, such as online dating, peer-to-peer lending, social media, and online medical advice. We have evidence that several uncertainty reduction mechanisms are at play when judging a provider's trustworthiness; namely, information richness, ability, benevolence and integrity. Furthermore, our study underlines the assumption that the number of words is a relevant indicator for information richness. Also, words related to positive emotions are positively related to trustworthiness. Concerning the measurement of expertise, we would recommend developing a customized dictionary because expertise is very context-specific.

From a practical point of view, providers in the sharing economy would be advised to pay close attention to their profile text and develop a description of sufficient length, including elements of enthusiasm and expertise in order to increase their trustworthiness. However, it must be noted that features that are easy to fake (e.g. lengthy descriptions), can become less important in their contribution to perceived trustworthiness. Second, owners of sharing platforms could design their website in such a way that users are encouraged to curate their profile, to stimulate trust; this could result in more transactions. For example, users could be obliged to provide a minimum number of words about themselves. In the SYM case, 48% of providers have a profile containing fewer than 20 words. Providing enough information may seem to be an obvious task when attracting customers, it is one that is often neglected. A platform could actively give pointers about what to write in a profile, so that users are stimulated to write about relevant topics to enhance their trustworthiness.

Limitations

We believe that our research helps to elucidate how trust is built via online profiles in the sharing economy. By using actual SYM consumers in our research, we ensured that the results had ecological validity. However, our study encountered some challenges that should be addressed. First, the response rate to the survey

was lower than expected, which could make it difficult to generalise the results to the SYM population. However, a comparison between our sample data with SYM population data showed large similarities, indicating that the results may be generalisable.

Second, not all profiles used in the analysis received the desired 10 ratings. Because of the low response rate, we lowered the threshold for a profile to be included in the analysis to five ratings or more, to ensure that the main analysis contained a satisfactory number of profiles. This might have caused inaccuracy in determining the trustworthiness score for profiles with five ratings compared with profiles with 10 ratings. Nevertheless, we were able to find significant results for most of our explanatory variables, suggesting that a lack of power did not hamper the analysis.

Lastly, the setting in which respondents read the profiles deviated from the natural online setting. It is highly likely that the participants paid more attention reading the content of the profile in the research condition than they would do in practice, because online reading behaviour is characterized by browsing, scanning, and selective reading, and less time is spent on in-depth reading (Z. Liu, 2005). In line with the Elaboration Likelihood Model of persuasion, recipients of information probably follow the *central route* (looking for additional information and scrutinizing the arguments) when they view the source as untrustworthy (Petty & Cacioppo, 1986). Given that our respondents likely followed a more central route when rating the profiles, this could have caused a tendency towards a different rating score as a result of paying more attention to the profiles.

Future Research

Research into developing trust between peers in the sharing economy has focused on several antecedents, such as reputation, profile pictures, and characteristics of the peer (Bente et al., 2012; Ert et al., 2016; Karlsson, Kemperman, & Dolnicar, 2017). It would be interesting to study how linguistic features would relate to other trust antecedents (e.g. a user's reputation score, reviews, and a profile picture) and their relative importance. Also, it would be of interest to examine possible boundary conditions of linguistic features: when do they and when do they not affect trust and/or sales. For instance, features such as word count might be used more often when uncertainty is higher, for instance when ordering from a novice provider. Additionally, the fact that linguistic features are easy to fake opens interesting pathways for future research. For instance, one could pose the question to what extent linguistics features are effective in influencing trusting beliefs when opportunists purposely misuse them.

Furthermore, we assumed that perceived trustworthiness is an underlying mechanism for a successful transaction. To test whether this is the case,

future research could be conducted with the aim to find a mediation effect of perceived trustworthiness on the relation between linguistic features and sales performance. In doing so, it is important to include an adequate sample size of profiles, because of the small effect sizes of linguistic features on perceived trustworthiness, and perceived trustworthiness on sales performance.

Finally, we found indications that linguistic features are relevant in creating a trustworthy image in the context of one sharing platform. It would also be of interest to know whether these results can be extrapolated to other peer-to-peer commerce contexts (e.g. car sharing, exchange of goods).

Conclusion

To conclude, language use in providers' profiles can affect their perceived trustworthiness and therefore is of importance in creating trust. To create a more trustworthy image, providers could address consumers' specific psychological needs and deploy persuasive strategies. If this is done, trust can be effectively enhanced and transactions in the sharing economy might be boosted.

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THE INFLUENCE OF SENSE OF COMMUNITY AND SOCIAL IDENTIFICATION ON TRUST IN THE SHARING ECONOMY

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ABSTRACT

Property sharing is one of the most prominent examples of the rapidly expanding sharing economy. Travellers around the world often opt to stay at a stranger's apartment instead of any other tourism accommodation. Trust is essential in this choice, because staying with, or taking in, strangers can entail great risks. To create trust between users, sharing platforms often promote a sense of community. However, the relation between sense of community and trust in the sharing economy is still largely unknown. To investigate this relation, both hosts and guests of two sharing platforms, namely Airbnb and SabbaticalHomes, were surveyed. The findings indicate that sense of community indeed enhances trust between users. Moreover, the evidence suggests that hosts have a stronger sense of community than guests. Also, a significantly higher sense of community was found on the platform where identification between users is higher. This study shows that affect for the community contributes to the understanding of trust in the sharing economy.

INTRODUCTION

Letting strangers sleep in one's apartment while one is away is something that would have been considered improbable just a decade ago. However, this is exactly what is happening on a large scale via the online platform Airbnb,¹⁴ part of a larger phenomenon called *the sharing economy*. Although very popular, exchange in the sharing economy is not without risks. Guests and hosts on Airbnb, for example, can be confronted with disappointing accommodation or property damage, respectively. Consequently, trust has been identified as a key factor for successful transactions in the sharing economy (Belk, 2010; Botsman & Rogers, 2010; Horton & Zeckhauser, 2016).

One of the challenges regarding trust in the sharing economy is overcoming people's fear of *stranger danger* and helping them to view hosts or guests as friends whom they have not met yet (Möhlmann & Geissinger, 2018). To reduce perceptions of stranger danger and to reassure users that using the platform is safe, sharing platforms stress the importance of the community in their marketing strategy. Airbnb, for example, states on its website that the values of the Airbnb community provide safety and lead to trust for travellers and hosts.¹⁵ Sense of Community (SoC) can provide for a community marketplace where people matter to one another, ultimately leading to trust between users (Celata, Hendrickson, & Sanna, 2017).

SoC is an individual feeling that people in a community belong and matter to one another; this can provide for trust because, through the development of community norms, people know what to expect from one another (McMillan, 1996). Experiencing SoC in sharing economy marketplaces motivates owners to share and to be assured that other users adhere to a basic set of principles and norms (Bardhi & Eckhardt, 2012). A study on trust between virtual community members, for instance, has shown that SoC in a virtual community (D. Wang & Nicolau, 2017) plays a significant role in developing mutual trust (Blanchard et al., 2011). It increases the belief that co-members adhere to community norms and thus can be trusted.

Research on SoC has been conducted in different types of communities, such as face-to-face communities (McMillan & Chavis, 1986), virtual communities (Chang, Chang, & Hsieh, 2016), and brand communities (Carlson, Suter, & Brown, 2008). Sharing communities, however, where SoC is likely to play a role, have received very little academic attention to date. Therefore, the level of SoC within sharing communities remains unclear. Moreover, its influence on

¹⁴ Since 2008 there have been over 200 million guest arrivals (Airbnb, 2017).

¹⁵ <https://www.airbnb.com/trust?locale=en>

facilitating trust between users is not fully understood, leaving the marketing claims of sharing platforms unchallenged. A study investigating SoC in a sharing community would provide insights into a new type of community that is becoming increasingly popular and therefore would complement existing community research.

The objectives of this research are to measure the level of SoC on different sharing platforms and to investigate its influence on trust between users, leading to the following research questions: *What is the level of SoC between users of sharing platforms?* and *To what extent does SoC influence trust in other users of sharing platforms?* The answers to these questions will contribute to a further understanding of how trust in the sharing economy is formed. These questions are empirically tested using a survey study on two accommodation platforms, i.e. Airbnb and SabbaticalHomes. Whereas Airbnb is a general platform, SabbaticalHomes is a platform aimed at a more close-knit community, namely members of the academic community. These two platforms are compared because they are similar in the product offered and it is expected that the extent to which users can identify with each other could influence SoC. Therefore, a platform was selected on which users are expected to have a lower identification with others (i.e. Airbnb) and another where users are expected to have a higher identification with others (i.e. SabbaticalHomes).

The remainder of the article is structured as follows. First, the background to the relevant theoretical concepts and the hypotheses of the study are presented. In the next section, the research method is discussed, after which the results are presented. Lastly, the findings are discussed and implications for theory and practice are outlined.

BACKGROUND

The term sharing economy has grown in popularity, especially since Rachel Botsman and Roo Rogers popularized the term in their book *What's mine is yours* (2010) and in multiple TED talks.¹⁶ Botsman and Rogers (2010) distinguish three different consumption systems that make up the sharing economy, i.e. product service systems (e.g. Airbnb), redistribution markets (e.g. craigslist), and collaborative lifestyles (e.g. ParkAtMyHouse). Although this classification provides a clear overview of the sharing economy, agreement on defining the sharing economy is far from being reached (Dredge & Gyimóthy, 2015). Nonetheless, many definitions emphasize 1) the peer-to-peer character of

¹⁶ See for an example TED talk https://www.ted.com/talks/rachel_botsman_the_currency_of_the_new_economy_is_trust

transactions and 2) the fact that the resources that are shared would otherwise be underutilized. To incorporate these facets, in this study, the sharing economy is viewed as “an economic model based on sharing underutilized assets between peers without the transfer of ownership, ranging from spaces, to skills, to stuff, for monetary or non-monetary benefits via an online mediated platform” (ter Huurne et al., 2017, p. 2).

The Importance of Trust in the Sharing Economy

Trust in the sharing economy is of utmost importance, because transactions are initiated in an online context where consumers are unable to inspect goods upfront, personal interaction is possible only to a limited extent, and regulations are often absent. In fact, a successful transaction without trust would be inconceivable, as trust is important especially for the sharing economy where products and services are exchanged between strangers (Tussyadiah & Park, 2018).

For the purpose of this study, trust is viewed from the group level because the unit of analysis is the group comprised of community members on sharing platforms. Group trust exists, or has to be built, between an individual and the collective with whom that individual is dealing (McEvily, Weber, Bicchieri, & Ho, 2006). It can be defined as “a particular level of the subjective probability with which an agent assesses that another agent or group of agents will perform a particular action” (Ostrom & Ahn, 2009, p. 9). In brief, trust in sharing communities is necessary, as it leads an individual to have positive expectations about group members not harming one another, thereby inciting that individual to rely for outcomes on others in the community and dare to participate in the community.

The role of trust in the sharing economy deviates from that in more common economic transactions for at least five reasons. First, consumers are protected less via rules and regulations compared to traditional transactions, causing legal grey areas and regulatory uncertainty (Ranchordás, 2015). Second, trust has moved from a dyadic relationship between a consumer and a provider to a triad of relationships, including the sharing platform that facilitates the transaction (Möhlmann, 2016). This alteration has generated trust relationships between peers, and between peers and the sharing platform, making the act of sharing complex and blurry. Third, transactions have both an online and an offline component, entailing information barriers and possible personal risks. Fourth, consumption has shifted from owning products to a situation whereby consumers use products temporarily and pay for access to them (Botsman & Rogers, 2010). This could entail risks regarding damage to, or theft of, property. Lastly, when service exchanges are included in the definition of the sharing economy (e.g. accommodation, taxi services, cleaning), there are more complex activities that can go wrong (e.g. hospitality, punctuality, planning) than found in product exchange (Möhlmann, 2016).

Forms of Trust

Another significant aspect of trust is that it can have different foundations depending on the type of relationship (Rousseau et al., 1998). Habibi, Kim, and Laroche (2016) discern two types of relationships in the sharing economy, i.e. market exchange and communal relationships. Market exchange relationships are based on the expectation that a given benefit is returned in a comparable way or in repayment for a benefit received previously (Clark & Mills, 1993). In market exchange relationships, trust is often based on an ongoing calculation of sustaining or leaving the relationship, also called calculus-based trust (Lewicki & Bunker, 1995). Calculus-based trust is derived from credible information about the intentions or competence of the other, as well as the possibility of applying sanctions (Rousseau et al., 1998). For example, in the online shopping context, calculus-based trust can be based on trust measures such as security certificates, return policies, and user feedback (Roghanizad & Neufeld, 2015). In the sharing economy, a user's (both provider's and consumer's) reputation, reviews from other users, and guarantees set by the sharing platform are important sources of trust (Ert et al., 2016; Thierer et al., 2015) and can be viewed as drivers of calculus-based trust. When a person considers transacting in the sharing economy from a market exchange perspective, he or she might have a higher need for calculus-based trust when developing trust in others and thus make more use of it in his or her buying decisions.

In communal relationships, people give benefits to others in response to needs or to demonstrate a general concern for the other person (Clark & Mills, 1993). Trust in communal relationships is often based on emotional bonds between individuals, also referred to as affect-based trust (McAllister, 1995). Affect-based trust in relationships means that people make emotional investments, such as caring for others and their wellbeing, in the belief and expectation that these sentiments will be reciprocated (McAllister, 1995). McAllister (1995, p. 26) emphasizes the importance of emotions for trust by stating that "the emotional ties linking individuals can provide the basis for trust".

Previous research on trust in the sharing economy has focused mainly on calculus-based trust measures, such as reputation, the use of profile pictures, and the effect of verified identities (e.g. Ert et al., 2016; Teubner, Hawlitschek, & Dann, 2017; Wang & Nicolau, 2017), leaving affect-based trust unexplored. In this study, therefore, how affect-based antecedents form a basis for trust in other users in the sharing economy is investigated by using SoC and social identification as an additional basis on which trust relations between users in the sharing economy can be built and sustained.

Sense of Community

The term community has been defined as “networks of interpersonal ties that provide sociability, support, information, a sense of belonging, and social identity” (Wellman, 2005, p. 53). The presence of elements of SoC in a community, for example when people seek to connect and bond with one another, is often seen as evidence for the existence of a community (Decrop, Del Chiappa, Mallargé, & Zidda, 2017). McMillan and Chavis (1986) distinguish four dimensions of SoC, namely (1) membership – relating to the feeling that one is part of a group, (2) influence – whether one has some sort of influence in the group, (3) integration and fulfilment of needs – believing that one’s needs will be met through the community, and lastly (4) shared emotional connection – concerning shared history and shared participation.

Clearly, these elements vary in strength between sharing communities. Couchsurfing, for instance, is well-known for connecting people all over the world to provide a place to stay on their travels. It has succeeded in doing so, *inter alia*, by creating feelings of connectedness and bonding between its members (Decrop et al., 2017; Rosen et al., 2011). Uber, on the other hand, can be viewed as an example of a sharing platform where relations between users are of minor importance because an individual is booking a taxi. In this study, the SoC concept is used to investigate how members of a sharing platform relate to one another, as SoC is important in shaping the relational aspect of social exchanges (Sandefur & Laumann, 1998). Also, SoC has been associated with several positive community outcomes, such as higher participation in activities, loyal community members, and a stronger commitment to the community’s goals (Chang et al., 2016; McMillan & Chavis, 1986). Therefore, it is an important construct for measuring community strength.

With regard to characteristics, communities have been discerned as geographical communities (e.g. neighborhoods) and relational communities (e.g. brand-based communities) (Gusfield, 1975). The first are bound by territories, whereas the latter are concerned with the “quality of character of human relationship, without reference to location” (Gusfield, 1975, p. 16). Sharing communities, however, entail aspects of both geographical and relational communities, because users meet offline when completing transactions and are connected in a virtual manner. This process creates a hybrid type of community in which users can experience SoC in various ways, namely via offline social interactions, via the feeling of knowing that other users exist, and possibly via the brand of the sharing platform. Nonetheless, the number of social interactions between members of sharing platforms is usually limited, making the psychological nature of sharing communities more salient. In this study, Carlson et al.’s (2008, p. 286) definition of SoC as “the degree to which an individual perceives relational bonds with other brand users” is adopted to accommodate the psychological aspect of sharing communities.

Regarding the relation between SoC and trust, SoC has been associated with trust in both offline and online communities (Blanchard et al., 2011; McMillan, 1996). Rosen et al. (2011), for example, found a significant positive correlation between SoC and trust among Couchsurfing community members. These findings suggest that trust and SoC also play a role in sharing communities. In the development of SoC, community norms play an important role (Blanchard et al., 2011). When a community becomes more connected, social norms develop and strengthen. These norms create social pressure on group members to act in a certain way and can reinforce their bond with the community (Blanchard et al., 2011). Consequently, when community members adhere to prevalent norms, their actions become predictable and reliable to others, making them trustworthy. Sharing platforms also try to establish social norms. Couchsurfing, for instance, informs users on how to behave and communicate, both upfront and during their stay (e.g. "get to know the 'rules' of the house"). Concluding, SoC can create bonds between users within sharing communities and mediates the relationship between norms and trust between users. It is thus hypothesised that:

H1: SoC relates positively to trust in other community members in the sharing economy.

Social Identity Theory

Social identification is strongly related to SoC, and the interplay between the two constructs requires the inclusion of social identification in studies of communities (Blanchard, 2008; Blanchard & Markus, 2004; Obst & White, 2005). Social identification is a recurrent element in different dimensions of SoC, because the extent to which one sees oneself as a member of a community and feels emotionally connected to other members is an important element. Despite this, social identification is not measured separately in classical measures of SoC (Obst & White, 2005). Social identification is therefore included in this study as a separate concept in the investigation of sharing communities, also because it can be applied to two objects, namely to other users and to the platform.

According to social identification theory, an individual's personal identity is largely derived from his or her (perceived) membership of a social group (Tajfel & Turner, 1979). Social identification occurs when one experiences a certain level of oneness with the group, which leads to thoughts, feelings, and expectations that are consistent with those of the group (Hogg & Terry, 1995). However, for social identification to occur, face-to-face contact between group members is not a necessity; it can also be developed without any social interaction, for example, in the case of identification with brands (Carlson et al., 2008).

In sharing communities, trusting other community members often occurs under the condition of limited information about the other, making it difficult to

develop trusting beliefs. However, social identification with the group can lead to favourable perceptions of group members and consequently to trust in others (Kramer, Brewer, & Hanna, 1996; Kramer & Goldman, 1995). Previous research has shown that trusting beliefs can be influenced by the mere fact that people are members of the same group and that these perceptions are amplified when identification with the group is strong (De Cremer & Van Vugt, 1999). Blanchard et al. (2011) state that group norms serve as the underlying mechanism by which social identification leads to trust. A person's identification with the group implies a perceived overlap between the person's own identity and that of the group (Ashforth & Mael, 1989), resulting in understanding and adhering to group norms (Postmes, Spears, Lee, & Novak, 2005). A strong identification with members of a sharing community is therefore expected to lead to increased trust in those members. Thus, it is proposed that:

H2: Social identification with other users relates positively to trust in community members.

Besides identifying with group members of a community, an individual can develop a social identification with organizations. Bhattacharya and Sen (2003) state that strong consumer–company relationships are based on consumers' identification with an organization that helps them satisfy their need for self-definition. A company can represent an attractive and meaningful object of identification that is used by consumers to self-categorize. For example, people can perceive a strong identification with Couchsurfing because of the perceived attractiveness of its mission, principles, and leadership.

We believe that favourable perceptions of an organization (i.e. sharing platform) could transfer to the users of that platform, in turn leading to positive trusting beliefs about those users. Users of a sharing platform form an integral part of the platform, and, because of their membership of a platform, they can be perceived as sharing the organization's mission and values. For example, people traveling with Couchsurfing can be perceived as sharing the values of Couchsurfing, i.e. creating connections, offering kindness, and sharing their life.¹⁷ This perceived similarity in shared values could lead to enhanced trusting beliefs (Doney & Cannon, 1997; Dwyer, Schurr, & Oh, 1987), as people tend to trust others who are similar to themselves (Ziegler & Golbeck, 2007). On sharing platforms, people engage with one another because of joint interests, beliefs, or values, and these similarities might aid trust building among community members. From the above, it is posited that:

H3: Social identification with a sharing platform relates positively to trust in other platform members.

¹⁷ Couchsurfing's values: www.couchsurfing.com/about/about-us

Expectations about a trustee can be grounded on different bases and can change over time. Taking only one base into account in this study would risk missing the diversity of trust in various settings (Rousseau et al., 1998). According to Rousseau et al.'s (1998) Model of Trust, a high level of calculus-based trust is associated with a low level of affect-based trust, and vice versa. They observe that variations in trust might be attributable to a tension between acting out of self-interest and acting out of the interests of a collective. In this study, it is assumed that users in the sharing economy who experience a high level of affect-based trust have a lower need for calculus-based trust. More specifically, users who believe that other users adhere to group norms are deemed to have less need for information about other actors (i.e. the platform, other platform users, and the transaction partner) to learn about the trustworthiness of the other or to sanction. Hence, the following is hypothesised:

H4a: SoC relates negatively to the need for information about other actors.

H4b: Social identification with other users relates negatively to the need for information about other actors.

H4c: Social identification with a sharing platform relates negatively to the need for information about other actors.

Figure 5.1 displays the theoretical constructs of this study and the underlying hypothesised relations.

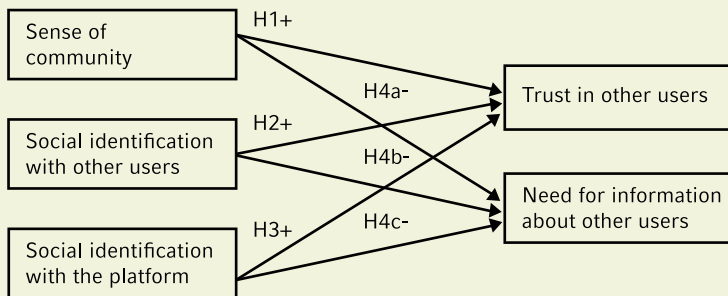


Figure 5.1. The Research Model

Differences between Platforms

The sharing economy is often portrayed as a social economy that distinguishes itself from traditional marketplaces because it is assumed to connect people, build relationships between them, and stimulate social cohesion (Schor, 2014). Discussing the sharing economy in such a broad manner would imply that sharing platforms across the board are quite similar. However, there is a large variety between platforms in the way they contain the social dimensions of sharing and how people feel connected to them (Habibi et al., 2016). There are platforms in which members feel a strong connection (e.g. Couchsurfing) and platforms with loosely linked members (e.g. Uber). It is therefore important to investigate differences between platforms in the way members feel connected to them, to understand how relational trust operates under varying conditions of SoC.

To this end, two sharing platforms, namely Airbnb and SabbaticalHomes, have been selected that fit within the previously stated definition of the sharing economy.¹⁸ These two platforms are equivalent in the type of shared product (i.e. accommodation) but expected to differ in the nature of each user's relation with both the platform and other users. In this study, this difference between the platforms is believed to affect the experienced level of SoC and social identification. For reasons of conciseness, it is summarily hypothesised that:

H5: The experienced level of SoC and social identification of SabbaticalHomes users is greater than that of Airbnb users.

There is a distinct role division between users on sharing platforms, namely that of providers and consumers; or, in the case of accommodation platforms, hosts and guests. Because there are no theoretical expectations a priori regarding possible differences between hosts and guests regarding their perceptions of SoC and social identification, a hypothesis is not formally proposed. Instead, the following research question is posed:

RQ1: To what extent do SoC and social identification differ between hosts and guests?

METHOD

To test these hypotheses, an online survey design is adopted, as such designs are well-suited to testing personal beliefs and attitudes (De Leeuw, Hox, & Dillman, 2008).

¹⁸ Airbnb: www.airbnb.com; SabbaticalHomes: www.sabbaticalhomes.com

Instrument Development

The survey was designed to gather data about the following constructs: SoC, social identification with other community members, social identification with the platform, need for information about other actors, and trust in other community members. Before the main questionnaire, a screening question was included to recognize users of the platform.

SoC was measured using the psychological sense of brand community scale (six items) developed by Carlson et al. (2008). Questions were measured on a 7-point Likert-type scale ranging from (1) “strongly disagree” to (7) “strongly agree”. To examine whether respondents viewed users of the sharing platform as a collective, or whether they made a distinction between guests and hosts, respondents were asked who they had in mind when answering the questions about SoC.

Next, social identification with other community members was measured with Bergami and Bagozzi’s (2000) two-item measure. The first item asked the respondents to what extent they identified with other users on a 7-point scale ranging from (1) “not at all” to (7) “very much”. The second item consisted of a visual scale of eight pairs of circles depicting the level of overlap between the respondents’ identity and that of other community members. Respondents were asked which pair of circles reflected best their perceived overlap with the identity of other users. He, Li, and Harris’s (2012) measure for brand identification (five items) was adapted to measure social identification with the platform using a 7-point scale ranging from (1) “strongly disagree” to (7) “strongly agree”.

From e-commerce literature regarding the measurement of calculus-based trust (e.g. Chen, 2009; Hernandez & Santos, 2010), no suitable items could be retrieved for this study’s context. To be more specific, earlier studies measured calculus-based trust with items concerning the reputation of the website or by using items related to the context of wholesalers and distributors. Therefore, we designed a scale for calculus-based trust based on its definition, which registers respondents’ perceived importance of their need for information about other actors through several information sources (i.e. reputation, reviews, profile picture, profile text, verification, contact with the platform) for booking an apartment (if the respondent was a guest) or for receiving a booking request (if the respondent was a host). The questions were measured on a 7-point scale ranging from (1) “very unimportant” to (7) “very important”. The dependent variable, trust in other community members, was measured using Pavlou and Gefen’s (2004) 3-item scale.

Previous research was used to control for several attributes, namely personality-oriented attributes (i.e. education, sex) (Lamberton & Rose, 2012), experience-

based attributes (use of the platform) (D. Kim, Ferrin, & Rao, 2008; Mittendorf, 2016), trust in the platform (Möhlmann, 2016), and disposition to trust (Yamagishi & Yamagishi, 1994).

To make the survey applicable in the Dutch context, the 5-stage back-translation process as proposed by Beaton, Bombardier, Guillemin and Ferraz (2000) was applied. The first four stages are aimed at acquiring the best possible translation of the original items. The final stage consists of pretesting the prefinal version of the survey in two steps. First, two cognitive interviews were conducted to test whether the questions fulfilled their intended purposes (Willis & Artino, 2013). Second, the prefinal version of the survey was administered to 54 Airbnb users to assess construct validity.

In order to facilitate the interpretation of latent constructs, factor analysis was applied. Before starting the factor analysis, sampling adequacy was checked using the Kaiser–Meyer–Olkin criterion (KMO) and Bartlett’s test of sphericity. A value of $KMO \geq 0.50$ and a significant Bartlett’s test indicate an adequate sample (Hair, Black, Babin, & Anderson, 2014). (The items “The verification of the host”, “The possibility to contact the X Help Centre”, and “The possibility of compensation of damages from X”, were eliminated. These are not conceptually less related to the factor *Need for information about other actors* but are more institutional safeguards and considerably reduced the internal consistency of the measure.) Extracted factors with an eigenvalue greater than 1.0 and variables with an item-loading greater than 0.40 were used to obtain a clear factor structure (Hair et al., 2014). Finally, to assess the reliability of the measures, Cronbach’s alpha (α) for internal consistency was used, therewith applying a threshold of 0.70 (Hair et al., 2014). The Cronbach’s alpha of 0.70 was not quite reached for Airbnb, but this scale was maintained for the consistency of the measurement with the SabbaticalHomes platform. For the last platform, the scale showed sufficient consistency. The results for the exploratory factor analysis of both platforms and the overall sample are presented in Table 5.1.

Data Collection and Measurement

Airbnb users are hard to reach because the platform is fairly new, users form a small part of the total population, and probability sampling is not possible without cooperation from Airbnb itself (Guttentag, Smith, Potwarka, & Havitz, 2017). Therefore, the use of a nonprobability sampling approach was deemed necessary. To bolster and diversify the sample, various sampling techniques were used. Invitational messages to join the survey were sent via online messenger services, Dutch Facebook groups of Airbnb users, alongside calls on Twitter and LinkedIn using relevant hashtags. Also, a professional blogger on the sharing economy was approached to include the survey link in his newsletter. Although the sampling techniques were non-random, the use of different sampling

Table 5.1. Results of Exploratory Factor Analysis

Construct items	Airbnb (n = 190)		SabbaticalHomes (n = 232)		Adapted from
	Factor loading	KMO, Bartlett measure (p)	Factor loading	KMO, Bartlett measure (p)	
<i>Trust in other community members</i>					
You can rely on X users to do what they say	0.71	0.70, 0.001	0.87	0.73, 0.001	(Pavlou & Gefen, 2004)
X users are generally honest	0.88		0.79		
X users are generally reliable	0.88		0.87		
			0.91		
<i>Sense of community</i>					
I feel a strong bond with other X users	0.88	0.93, 0.001	0.96	0.73, 0.001	(Carlson et al., 2008)
I find it very easy to bond with other X users	0.82		0.80		
I feel a sense of connection with other X users	0.93		0.86		
I feel a sense of friendship with other X users	0.86		0.92		
Using X gives me a sense of community with other users	0.92		0.88		
I feel a sense of belonging with other X users	0.90		0.89		
<i>Social identification with other users</i>					
To what extent do you identify with other X users?	0.64	0.50, 0.001	0.70	0.50, 0.001	(Bergami & Bagozzi, 2000)
Could you indicate the level of overlap between you and other users?	0.64		0.74		
<i>Social identification with the platform</i>					
If someone criticizes X, it feels like a personal insult	0.80	0.85, 0.001	0.85	0.84, 0.001	(He et al., 2012)
I am very interested in what others think about X	0.45		0.76		
X's successes are also my successes	0.81		0.72		

Construct items	Airbnb (n = 190)		SabbaticalHomes (n = 232)		Adapted from
	Factor loading	KMO, Bartlett measure (p)	Factor loading	KMO, Bartlett measure (p)	
When someone recommends X, it feels like a personal compliment	0.87		0.88		
If X were to receive negative press, I would feel ashamed	0.70		0.70		
<i>Need for information about other actors (guest version)</i>					
Suppose you want to book an apartment using X. How important would the following aspects be to you?		0.68, 0.001		0.73, 0.001	0.75
The number of stars of an apartment*	0.54		-		Constructed by the authors
The reviews about the apartment written by other guests	0.71		0.66		
The host's profile picture	0.42		0.47		
The host's profile text	0.48		0.77		
The reviews about the host written by other guests	0.74		0.77		
The verification of the host (e.g. email address, telephone number, or social media profile)	Eliminated		Eliminated		
The possibility to contact the X Help Centre	Eliminated		Eliminated		
<i>Need for information about other actors (host version)</i>					
Suppose you receive a booking request through X. How important would the following aspects be for you to accept the booking?		0.63, 0.001		0.78, 0.001	0.75
The written reviews about the guest	0.42		0.68		Constructed by the authors
The guest's profile picture	0.71		0.63		
The guest's profile text	0.68		0.77		
The verification of the guest (e.g. email address, telephone number, or social media profile)	Eliminated		Eliminated		
The possibility to contact the X Help Centre	Eliminated		Eliminated		
The possibility of compensation of damages from X*	Eliminated		-		

Notes:

1. X stands for the name of the platform.
2. Items with an * were not included in the SabbaticalHomes survey, because these items were not applicable in the context of SabbaticalHomes.
3. Items of the control variables can be provided by the authors upon request.

techniques was intended to reduce possible sample bias in the study. This way of sampling concurs with that of other studies on Airbnb users (e.g. Guttentag, 2016; Mittendorf, 2016).

Because in this study nonprobability sampling techniques were used, the general representativeness of the sample was assessed using demographic characteristics of the Dutch Airbnb community (Airbnb, 2016). According to Airbnb, the average age of a host is 41; in the present study, this figure was 37.97. Furthermore, 56% of Airbnb hosts are female versus 55.79% of the respondents in the Airbnb case in this study. Comparison of the sample characteristics with Airbnb population data reveals large similarities, indicating that the results may be generalizable, keeping in mind the selectivity of the sampling frames.

Table 5.2. Sample Characteristics of Airbnb and SabbaticalHomes

Characteristics	Airbnb (n = 190)	SabbaticalHomes (n = 232)	Pooled Sample (N = 422)
Sex			
Male	44.21% (84)	28.32% (66)	35.55% (150)
Female	55.79% (106)	70.35% (163)	63.74% (269)
Other		1.33% (3)	0.71% (3)
Age	M = 37.97 (SD = 12.17)	M = 57.66 (SD = 12.92)	M = 48.80 (SD = 15.94)
Highest level of education			
Non-university education	34.74% (66)	11.21% (26)	21.80% (92)
University education	65.26% (124)	88.79% (206)	78.20% (330)
In what capacity have you used the platform?			
As a guest	73.16% (139)	25.00% (58)	46.68% (197)
As a host	5.26% (10)	57.76% (134)	34.12% (144)
Both	21.58% (41)	17.24% (40)	19.19% (81)
Have you more often been a guest or a host?			
Guest	14.63% (6)	20.00% (8)	17.28% (14)
Host	78.05 (32)	57.50% (23)	67.90% (55)
About as often	7.32% (3)	22.50% (9)	14.81% (12)
Total times used the platform in the last 5 years			
0–4 times	47.89% (91)	65.52% (152)	57.58% (243)
≥5 times	52.11% (99)	34.48% (80)	42.42% (179)
Total time using the platform			
0–2 year	61.05% (116)	50.00% (116)	54.98% (232)
≥3 years	38.95% (74)	50.00% (116)	45.02% (190)
Recommend the platform			
0–5	11.05% (21)	0.86% (15)	8.53% (36)
6–7	28.42% (54)	10.35% (24)	18.48% (78)
8–9	60.52% (115)	83.19% (193)	72.99% (208)
Who did you have in mind most when answering questions about SoC?			
Guests	42.63% (81)	39.66% (92)	41.00% (173)
Hosts	17.89% (34)	22.41% (52)	20.38% (86)
All users	39.47% (75)	37.93% (88)	38.63% (163)

In collaboration with the owner of SabbaticalHomes, a random sample of 1,539 SabbaticalHomes users were invited by email to join the survey, resulting in 232

completed surveys. This represents a response rate of 15.07%, which is above that of similar studies (e.g. 8.4%, Petrovčič, Petrič, & Lozar Manfreda, 2016). Unfortunately, it was not possible to compare respondent characteristics with population data, because SabbaticalHomes does not keep track of user data.

Data collection for both platforms occurred online from October to December 2017. In total, 237 surveys were received for Airbnb, of which 47 were only partially completed and therefore eliminated, leaving a final sample of 190. For SabbaticalHomes, 295 surveys were collected, of which 232 were fully completed. A priori power analysis for linear multiple regression showed a power level of 0.99 for a sample size of 190, an anticipated effect size of 0.42, and a probability level of 0.05 (Faul, Erdfelder, Lang, & Buchner, 2007). The samples for both platforms reached the threshold of 190 respondents, indicating that the probability of making a type-two error is smaller than 0.01 for both studies.

Table 5.3. Correlations and Descriptive Statistics of Key Constructs

Construct	1	2	3	4	5	M	SD
1. Sense of community	1	0.74	0.59	0.52	0.05	4.55	1.57
2. Social identification with other users	0.65	1	0.52	0.44	0.05	4.54	1.48
3. Social identification with the platform	0.68	0.50	1	0.46	0.16	3.53	1.49
4. Trust in other users	0.41	0.37	0.29	1	0.06	5.51	1.13
5. Need for information about other actors	0.02	0.04	-0.01	0.28	1	5.04	1.29
Mean (M)	3.26	3.78	2.46	4.78	5.42	-	-
Standard deviation (SD)	1.60	1.33	1.27	1.10	0.92	-	-

Note: Airbnb (bold, lower diagonal and last two rows), SabbaticalHomes (upper diagonal and last two columns).

RESULTS

As can be seen in Table 5.2, 55.79% of Airbnb respondents and 70.35% of SabbaticalHomes respondents were female. Airbnb respondents were on average 37.97 years old (SD = 12.16 years), and SabbaticalHomes respondents were on average 57.66 years old (SD = 12.92 years). For both platforms, most respondents had obtained a university education (Airbnb: 65.26%; SabbaticalHomes: 88.79%). Concerning Airbnb, 73.16% of the respondents used the platform as a guest; the corresponding proportion for SabbaticalHomes was 25.00%. Regarding total frequency of use, 47.89% of Airbnb users used the platform 0–4 times; the corresponding figure for SabbaticalHomes users was 65.52%. As to total time using the platform, 61.05% of Airbnb users used the platform for up to 2 years, and for SabbaticalHomes the figure was 50.00%. People were quite satisfied with both platforms: 60.52% (Airbnb) and 83.19% (SabbaticalHomes) would likely recommend it to a friend or colleague (indicating the likelihood with 8 or higher on a 10-point scale). Finally, when answering questions about SoC, respondents had in mind mostly guests (Airbnb: 42.63%; SabbaticalHomes: 39.66%) and all users (Airbnb: 39.47%; SabbaticalHomes: 37.93%).

Table 5.4. Multiple Regression Analyses for Explaining Trust in Other Users

	Airbnb (M1)	Airbnb (M2)	SabbaticalHomes (M1)	SabbaticalHomes (M2)	Pooled sample
Sense of community		0.110 (0.067)		0.115* (0.052)	0.106** (0.041)
Social identification with other users		0.057 (0.067)		0.062 (0.053)	0.062 (0.042)
Social identification with the platform		-0.056 (0.075)		-0.027 (0.047)	-0.021 (0.041)
Trust in the platform		0.359*** (0.071)		0.602*** (0.059)	0.498*** (0.043)
Disposition to trust	0.426*** (0.064)	0.214** (0.070)	0.674*** (0.054)	0.135** (0.045)	0.151*** (0.037)
Age	0.235*** (0.069)		0.168*** (0.045)		
Sex	-0.003 (0.006)	-0.004 (0.006)	-0.005 (0.004)	-0.004 (0.004)	-0.001 (0.003)
Education	0.057 (0.137)	0.075 (0.136)	-0.109 (0.110)	-0.102 (0.107)	-0.005 (0.084)
Years using the platform	-0.127 (0.148)	-0.083 (0.151)	0.008 (0.165)	-0.058 (0.162)	0.005 (0.102)
Years used the platform	0.179 (0.148)	0.158 (0.148)	-0.073 (0.117)	-0.107 (0.114)	0.031 (0.091)
Times used the platform	0.322* (0.143)	0.247 (0.148)	0.366** (0.122)	0.294* (0.122)	0.247** (0.090)
Constant	1.267* (0.528)	1.345* (0.531)	0.877 (0.489)	0.947 (0.486)	0.952** (0.323)
Observations	190	190	232	232	422
R-squared	0.329	0.351	0.532	0.564	0.503
Mean VIF	1.11	1.49	1.14	1.56	1.60

Note: Standard errors in parentheses. *** $p<0.001$, ** $p<0.01$, * $p<0.05$

Table 5.5. Multiple Regression Analyses for Explaining Need for Information about Other Actors

	Airbnb (M1)	Airbnb (M2)	SabbaticalHomes (M1)	SabbaticalHomes (M2)	Pooled sample
Sense of community		-0.016 (0.067)		-0.025 (0.087)	-0.060 (0.056)
Social identification with other users		0.008 (0.067)		0.003 (0.088)	0.015 (0.052)
Social identification with the platform		-0.027 (0.075)		0.220** (0.079)	0.113* (0.056)
Trust in the platform		0.132 (0.071)		-0.045 (0.099)	-0.009 (0.059)
Disposition to trust	0.117 (0.063)	0.040 (0.070)	0.071 (0.089)	0.027 (0.075)	0.082 (0.051)
Age	0.034 (0.068)	-0.009 (0.006)	0.057 (0.074)	0.007 (0.007)	-0.009 (0.004)
Sex	-0.010 (0.006)	0.138 (0.136)	-0.015 (0.180)	-0.032 (0.178)	-0.011 (0.115)
Education	0.140 (0.135)	-0.089 (0.151)	0.069 (0.270)	0.079 (0.270)	-0.093 (0.140)
Years using the platform	-0.070 (0.155)	0.307* (0.148)	-0.349 (0.191)	-0.368 (0.189)	-0.059 (0.124)
Years used the platform	0.304* (0.146)	-0.126 (0.148)	-0.196 (0.200)	-0.320 (0.203)	-0.100 (0.124)
Times used the platform	-0.148 (0.141)				
Constant	4.947*** (0.520)	4.898*** (0.531)	4.482*** (0.801)	4.945*** (0.808)	5.512*** (0.443)
Observations	190	190	232	232	422
R-squared	0.067	0.069	0.031	0.069	0.032
Mean VIF	1.11	1.49	1.14	1.56	1.60

Note: Standard errors in parentheses. *** $p<0.001$, ** $p<0.01$, * $p<0.05$

The descriptive statistics of the key constructs are presented in Table 5.3 for Airbnb and SabbaticalHomes separately.

Tests of Hypotheses

Table 5.4 shows the regression results of trust in other users as reflected in the independent and control variables. Table 5.5 displays the regression results for the need for information about other actors. Tests for multicollinearity for both dependent variables indicated that a very low level of multicollinearity was present (the highest observed Mean VIF was 1.60).

H1 stated that SoC has a positive influence on trust in other users. The results show that, for Airbnb, SoC is positively, but not significantly, related to trust ($b = 0.110$; $p = 0.102$). SoC was found to have a positive and significant effect on trust in other users for SabbaticalHomes ($b = 0.115$; $p = 0.029$). When both samples were combined, the effect of SoC on trust was also positive and significant, thereby providing some support for H1.

The second hypothesis stated that social identification with other users is associated positively with trust in other users. Social identification with other users did not have a significant result for either platform (Airbnb: $b = 0.057$; $p = 0.399$; SabbaticalHomes: $b = 0.062$; $p = 0.243$). Therefore, H2 is not supported.

H3 stated that social identification with the platform would increase trust in other users. However, no significant effect was found for either platform (Airbnb: $b = -0.056$; $p = 0.455$; SabbaticalHomes: $b = -0.027$; $p = 0.563$), and therefore H3 is not supported.

Hypothesis 4a claimed that there is a negative relation between SoC and the need for information about other actors. No significant negative effect was found for either platform (Airbnb: $b = -0.016$; $p = 0.813$; SabbaticalHomes: $b = -0.025$; $p = 0.777$); hence, H4a is not supported.

The relation between social identification with other users and the need for information about other actors was not significant for either platform (Airbnb: $b = 0.008$; $p = 0.903$; SabbaticalHomes: $b = 0.003$; $p = 0.970$). Consequently, H4b is not supported.

Finally, the postulated effect between social identification with the platform and the need for information about other actors was not negatively significant for either platform (Airbnb: $b = -0.027$; $p = 0.715$; SabbaticalHomes: $b = 0.220$; $p = 0.006$). Therefore, H4c is not supported.

For both platforms, various control variables (i.e. age, sex, education, years using the platform) had no significant impact on trust in other users, whereas other controls did have a significant effect (i.e. trust in the platform (Airbnb: $b = 0.359$; $p = 0.001$; SabbaticalHomes: $b = 0.602$; $p = 0.001$), disposition to trust (Airbnb: $b = 0.214$; $p = 0.003$; SabbaticalHomes: $b = 0.135$; $p = 0.003$), and times used the platform (SabbaticalHomes: $b = 0.294$; $p = 0.017$)). Regarding the need for information about other users, there was a significant effect only for number of years using the platform (Airbnb: $b = 0.307$; $p = 0.039$).

Differences between Platform Type and Role Type on Independent Variables

A two-way analysis of variance was conducted for two independent variables (i.e. platform type, role type) on three dependent variables (i.e. SoC, social identification with other users, social identification with the platform). Type of platform included two levels (i.e. Airbnb and SabbaticalHomes), and role type also consisted of two levels (i.e. guest and host). Respondents were coded as guests if they indicated that they used the platform as a guest, if they more often used the platform as a guest, and if they used the platform about as often as a guest or a host. Hosts were identified if they answered that they used the platform in the capacity of host and more often as a host.

All effects on SoC were statistically significant at the 0.05 significance level (platform type: $F(1, 418) = 15.73$, $p = 0.001$; role type: $F(1, 418) = 53.89$, $p = 0.001$; platform type by role type: $F(1, 418) = 16.11$, $p = 0.001$). This indicates a significant difference between role type (guests: $M = 3.29$, $SD = 1.60$; hosts: $M = 4.73$, $SD = 1.50$) and platform type (Airbnb: $M = 3.26$, $SD = 1.60$; SabbaticalHomes: $M = 4.55$, $SD = 1.58$). The interaction effect was also significant ($F(1, 418) = 16.11$, $p = 0.001$), indicating that there is a significant difference in SoC between role type and platform type. This implies that, as expected, SoC is stronger at SabbaticalHomes than at Airbnb and that SoC is stronger for hosts than for guests.

Platform type and role type had a significant effect on social identification with other users (platform type: $F(1, 418) = 7.08$, $p = 0.008$; role type: $F(1, 418) = 20.86$, $p = 0.001$; platform type by role type: $F(1, 418) = 2.96$, $p = 0.09$). This indicates a significant difference between platforms (Airbnb: $M = 3.78$, $SD = 1.33$; SabbaticalHomes: $M = 4.54$, $SD = 1.48$) and role type (guests: $M = 3.79$, $SD = 1.39$; hosts: $M = 4.65$, $SD = 1.41$) on social identification with other users. Both independent variables showed significant main effects on social identification with the platform (platform type: $F(1, 418) = 8.92$, $p = 0.003$; role type: $F(1, 418) = 87.66$, $p = 0.001$; platform type by role type: $F(1, 418) = 5.78$, $p = 0.017$), indicating a significant difference between platforms (Airbnb: $M = 2.46$, $SD = 1.27$; SabbaticalHomes: $M = 3.53$, $SD = 1.49$) and role type (guests: $M = 2.35$, $SD = 1.15$; hosts: $M = 3.84$, $SD = 1.45$) on social identification with the platform. Also,

a significant interaction effect was found between platform type and role type on social identification with the platform, implying that social identification is stronger at SabbaticalHomes and for hosts.

GENERAL DISCUSSION

This study originated out of an interest in the role of SoC in the sharing economy and the extent to which it influences trust between community members. SoC, social identification with other users, and social identification with the platform were therefore posited to be positively related to trust in other community members. Another question examined was whether affect-based trust had a negative relation with calculus-based trust, as suggested by the literature (Rousseau et al., 1998). To investigate how these presumed relations held up in different contexts, two comparable but different sharing platforms, i.e. Airbnb and SabbaticalHomes, were compared. Further, to consider the different roles (i.e. hosts and guests) that people may have on accommodation platforms, the question of whether the results differed between the two roles was explored. Support was found for several hypotheses and for significant differences between platforms and between hosts and guests.

First, SoC has a positive influence on trust in other users. This effect is significant only for SabbaticalHomes; this is in line with the prediction that SoC would be especially important for SabbaticalHomes. It should be realized that the effect size of the effect of SoC does not differ significantly for Airbnb and SabbaticalHomes. So, it cannot be excluded that the effect of SoC on trust has a similar size in Airbnb as in SabbaticalHomes. Still, SoC adds more to trust for SabbaticalHomes because the experienced SoC is larger on this platform, as previously seen. The overall effect of SoC concurs with the theoretical predications in this study and leans on the institutional embeddedness of the transaction and internalized norms of community members. Institutional embeddedness refers to the contextual property of a situation in which organizations can shape behaviour by sanctioning and can serve as a signal of a trustee's individual properties (Riegelsberger et al., 2005). In the case of SabbaticalHomes, membership of the community serves as an incentive for the trustee, because untrustworthy behaviour could result in exclusion from the platform and tarnish his or her reputation in the academic community at large.

Regarding internalized norms, community members can act according to certain social norms prevalent in a group (e.g. generalized reciprocity). When communities become more interconnected and a SoC develops, social norms on how to behave become more ingrained. Knowing that a trustee desires to act in accordance with a social norm ensures that a trustor views a trustee

as trustworthy. In the case of sharing communities, a community member who experiences a SoC might believe that other members adhere to certain community norms and thus trust them.

Second, neither type of social identification has a negative significant effect on trust in other users. Previous research has shown that social identification especially leads to trust within close homogeneous groups with a salient social identity (Portes, 1998; Stolle, 1998). The findings of this study seem to suggest that the researched sharing communities are both rather loose heterogeneous groups without a salient social identity and that intragroup trust is thereby limited.

Third, this study shows that affective factors (i.e. SoC and social identification) do not lead to a lower need for calculus-based trust. The need for information on other users that is rooted in calculus-based trust did not decrease when users felt more connected with the community or identified themselves with others on the platform. This suggests that, when users feel affect towards the community, calculus-based trust is still an important foundation on which to establish trust in others. In that sense, affect-based and calculus-based trust are not communicating vessels but rather two separated constructs when it comes to trusting strangers. Alternative issues that might be behind the lack of a strong relation between these types of trust might be, first, that the measure of calculus-based trust is rather noisy (internal consistency is not that high) and therefore less related to other variables or second – and more substantively – that affect-based trust increases the need for information about the other not because of calculus-based trust, but because users are more interested in who the other person is.

Fourth, in this study, there is a significant difference between sharing platforms regarding SoC and social identification. The indications are that sharing platforms whose users share a similar background have higher levels of SoC and social identification than sharing platforms that do not. This finding could be explained by the *homophily effect* (McPherson et al., 2001) (i.e. people tend to associate and form bonds with others who are similar to them) and suggests that niche platforms, aimed at a particular target group (i.e. SabbaticalHomes), are more likely to form close and trusting communities compared to more general sharing platforms (i.e. Airbnb), thereby enhancing trust. This could also explain the emergence and success of niche platforms such as Misterbnb (aimed at the gay community), Noirbnb, and Innclusive (both aimed at travellers of colour).

Finally, significant differences, both within and across platforms, have been found between hosts and guests in their experience of SoC, social identification with other users, and social identification with the platform, suggesting a structural effect. This result may be explained by the fact that hosts view transactions on

the sharing platforms as a communal relation, whereas guests seem to adhere to a market-exchange perspective. This concurs with previous research (e.g. Guttentag et al., 2017; So, Oh, & Min, 2018), which found that cost saving was a top motivation for Airbnb guests.

Another possible explanation for the difference between hosts and guests is that it might be attributable to a difference in commitment between hosts and guests. To earn an income, hosts advertise their listing on a continuous basis and consequently might be more committed to the platform. Their commitment could result in higher levels of SoC and social identification with other users and with the platform, as they are more actively engaged with the platform. Future research could investigate the reasons why hosts and guests differ regarding their SoC.

Implications

The present study has several theoretical and practical implications. From a theoretical perspective, this study can be used to elucidate the mechanisms by which trust is created in the sharing economy and, consequently, three specific contributions can be formulated. First, as shown in this study, in addition to the calculus-based trust measures (e.g. reputation) (Ert et al., 2016) discussed in the literature, trust in the sharing economy is also affect-based. Affect-based trust does not, however, substitute the need for calculus-based trust in the initial stage of trust building; rather, both trust bases are complementary. Second, trust in the sharing economy is still under-researched, and much of the existing research focuses on calculus-based trust mechanisms (e.g. reputation, reviews, profile pictures) (ter Huurne et al., 2017), leaving affect-based trust unexplored. In order to work towards a model of trust for the sharing economy, affect-based trust should be taken into account. Third, a SoC can occur for sharing communities like it can for more traditional communities, such as neighborhoods and sporting clubs. In that sense, sharing communities are examples of what Duyvendak and Hurenkamp (2004) call *light communities*. Light communities are groups of which individuals can easily become a member and leave if they want to (e.g. volunteering organizations, schools), as opposed to *heavy communities* of which one cannot easily become a member or leave if one wants to (e.g. the family, certain religions). This would fit in a larger trend of people informally organizing themselves instead of pursuing *radical individualization* (Hurenkamp & Duyvendak, 2008). Lastly, the exploration of possible antecedents of SoC is advocated to understand how SoC comes to be on sharing platforms (e.g. expected benefits and community participation) (Tonteri, Kosonen, Ellonen, & Tarkiainen, 2011).

From a practical stance, this study generates several managerial suggestions. A significant difference in SoC has been found between hosts and guests across platforms; this is more explicit on the platform with low social identification

between members (i.e. Airbnb). This finding should be taken into account, for example, in the elaboration of a marketing strategy. It could be that hosts are more responsive than guests to messages that emphasize SoC. On the other hand, a low level of SoC among guests could give reason to put more effort into enhancing guests' level of SoC. So, platform owners could target hosts with the message that the community is strong and consists of members that help one another. Guests, on the other hand, could be targeted by emphasizing that the platform consists of many people like themselves, and that they are connected to kindred spirits.

Limitations and Directions for Future Research

This study has some limitations that need to be addressed. First, a nonprobability sample was used to recruit Airbnb users, making it difficult to generalize the results to the Airbnb population. However, a comparison between the sample characteristics and the Airbnb population data shows large similarities, indicating that the results may be generalizable. Second, the Airbnb sample in this study included only Dutch Airbnb users, and this may cause a possible bias in the data. Lastly, the measures of need for information on others were new measures developed for this study and might need some further consideration. One might question whether the need for information refers only to concerns about the trustworthiness of the other, or might also be related to genuine interest in who the other person is. This alternative interpretation would lead to other theoretical predictions. In future research, these two dimensions should be disentangled, possibly leading to more consistent measurement scales.

This study opens new directions for future research. It would be interesting to investigate whether the results would differ in other countries because of varying trust levels between countries, and thus make a cross-cultural comparison. Furthermore, this study could be extended by researching SoC on different types of sharing platforms, varying in type of product or service offered (e.g. ride sharing, running errands) and commercial orientation (e.g. Uber, Couchsurfing). The level of perceived risk could vary between products, thus impacting the amount of trust needed to successfully complete a transaction (Mayer et al., 1995). Next, platforms with a commercial orientation probably have a low level of SoC, and trust is less likely to be developed between users. Also, it would be interesting to gain more insight into how an individual's need for information about other actors moderates the perceived importance of, for example, ratings in a consumer's decision. This would shed light on how different levels of calculus-based trust affect the importance of trust cues (e.g. ratings, reviews) to choose a particular product.

CONCLUSION

To the best of our knowledge, this study is the first undertaken to investigate the relation between SoC and trust in the sharing economy. SoC is an important concept used in sharing platforms' marketing strategies to reduce perceptions of stranger danger and has been associated with positive community outcomes. Thus, it is important to take its influence on trust into consideration in any research on trust in the sharing economy. The results show that SoC affects trust and, additionally, that the level of SoC differs significantly between platforms and between people's roles on the platform. This study provides valuable insights for future research on trust in the sharing economy and accordingly sheds light on an emerging global phenomenon.

WITH
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A

An illustration of two stylized figures standing on a white horizontal line. On the left, a figure with long brown hair in a yellow dress holds up the letter 'G'. On the right, a figure in a red shirt and tan pants holds up the letter 'V'. The letters 'E' and 'A' are positioned between them, and the letter 'A' is at the bottom of the stack.

A
LEAP
INTO
FAITH

6

**NEDERLANDSE
SAMENVATTING**

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INLEIDING

Mijn eerste kennismaking met de deeleconomie was in de zomer van 2016, toen ik op vakantie zou gaan naar de Baltische staten – een onbekende bestemming voor mij en daarom des te aantrekkelijker. Omdat ik graag van tevoren mijn reis wilde plannen had ik een reisgids nodig. Die kon ik natuurlijk kopen bij een boekenwinkel, maar omdat ik waarschijnlijk niet veel vaker naar de Baltische staten zou gaan leek het zonde van mijn geld. Helaas had niemand in mijn sociale netwerk de gewenste reisgids. Er leek dus niets anders op te zitten dan er zelf een te kopen. Rond dezelfde tijd hoorde ik echter iets over Peerby, een deelplatform waar mensen uit dezelfde buurt spullen met elkaar kunnen delen. Ik besloot een poging te wagen en postte een verzoekje via de Peerby app. Na een paar uur antwoordde *Fenna* al dat ik haar reisgids voor de Baltische staten kon lenen en deze kon ophalen bij haar thuis.

Hoewel mijn probleem daarmee leek opgelost, waren er nog wel wat vertrouwenshorden te nemen. Zo moest ik erop vertrouwen dat *Fenna*'s reisgids nog in bruikbare staat was. En ook al was het niet waarschijnlijk; mijn eigen veiligheid kon in het geding zijn, want ik moest iets ophalen bij een volslagen vreemde. Ik was echter niet de enige die risico liep. *Fenna* moest er ook maar op vertrouwen dat ik met zorg met haar reisgids zou omgaan en deze ook weer in goede staat zou terugbrengen. En net als ik zou ook *Fenna* zich zorgen kunnen maken over haar persoonlijke veiligheid, want ook zij zou een volslagen vreemde in haar huis toelaten. Een complicerende factor bij dit alles was dat we ons niet tot Peerby konden wenden in het geval er iets mis zou gaan, want Peerby staat nergens voor garant en biedt ook geen verzekering waarop je je kunt beroepen. Het was duidelijk: om de overeenkomst te laten slagen, moesten *Fenna* en ik elkaar vertrouwen.

Deze anekdote laat zien dat de consumptiemogelijkheden zijn toegenomen door de deeleconomie, doordat consumenten rechtstreeks via online platforms met onbekenden kunnen lenen, delen en onderhandelen (Botsman & Rogers, 2010). Daarnaast wordt duidelijk dat consumeren in de deeleconomie risico's met zich

meebrengt en dat vertrouwen noodzakelijk is om uiteindelijk tot actie over te gaan. Het ontstaan van vertrouwen in de deeleconomie is echter opmerkelijk gezien de vele risico's die het met zich meebrengt. Traditionelere manieren van consumptie bieden doorgaans meer zekerheid vanwege wettelijke regelgeving en een betere bescherming van consumentenrechten. Dat de deeleconomie zo populair is, wijst erop dat gebruikers manieren hebben gevonden om elkaar te vertrouwen. Waarom mensen in de deeleconomie elkaar vertrouwen is echter lastig te verklaren, omdat er nog weinig tot geen literatuur hierover is (Hawlitschek, Teubner, Adam, et al., 2016). Bovendien wordt vertrouwen in online omgevingen onder verschillende risico-omstandigheden en met andere actoren bestudeerd, waardoor het onduidelijk is of bestaande vertrouwensmechanismen ook toepasbaar zijn in de deeleconomie.

Het doel van dit artikel is om een antwoord te vinden op de bredere vraag waarom gebruikers in de deeleconomie elkaar vertrouwen. Om dit doel te bereiken maak ik gebruik van het vertrouwensraamwerk van Riegelsberger et al. (2005) dat vertrouwen analyseert aan de hand van contextuele en intrinsieke eigenschappen. Dit raamwerk beschrijft een standaard vertrouwenssituatie tussen een trustor (iemand die vertrouwen geeft) en een trustee (iemand die vertrouwen ontvangt). Gebaseerd op het raamwerk, is de overkoepelende onderzoeksvraag van dit artikel: *Via welke contextuele en intrinsieke trustee-eigenschappen wordt het vertrouwen van een trustor in een trustee beïnvloed in de deeleconomie?* Door het beantwoorden van deze vraag draag ik bij aan het inzichtelijk maken van het ongekende fenomeen van delen tussen onbekenden op zo'n grote schaal. Bovendien kunnen deze inzichten platformeigenaars helpen om het vertrouwen tussen hun gebruikers te vergroten. De onderzoeksvraag wordt beantwoord door middel van drie empirische deelstudies die hier kort worden gepresenteerd.

Het artikel is als volgt gestructureerd. Als eerste wordt de definitiekwestie rondom de deeleconomie besproken, waarna het concept vertrouwen in de deeleconomie wordt behandeld. In de volgende sectie worden de resultaten van drie deelstudies kort uiteengezet, waarna in de laatste sectie een aantal overkoepelende conclusies worden gegeven, evenals implicaties voor theorie en praktijk en suggesties voor vervolgonderzoek.

WAT IS DE DEELECONOMIE?

Wat precies wordt verstaan onder de deeleconomie is onderwerp van veel discussie, omdat er verschillende meningen zijn over wat bedoeld wordt met delen en over wat er gedeeld kan worden. Sommigen hangen het klassieke idee van delen aan, dat wil zeggen niet-wederkerig prosociaal gedrag (Benkler, 2004). Dit sluit aan

bij auteurs zoals Eckhardt en Bardhi (2015), die stellen dat het maken van winst niet onder de noemer delen zou moeten vallen en dat delen vooral zou moeten gaan om het creëren van sociale waarde. Voor anderen (bijvoorbeeld Botsman en Rogers, 2010) is geld, en daarmee het maken van winst, juist ook onderdeel van de deeleconomie. Daarnaast is er onduidelijkheid over wat er allemaal gedeeld kan worden in de deeleconomie. Botsman (2013) beschouwt de deeleconomie als de uitwisseling van producten en diensten, terwijl Frenken, Meelen, Arets en Van de Glind (2015) zich beperken tot alleen de uitwisseling van fysieke middelen.

Om de volle reikwijdte van de deeleconomie, en daarmee de verschillende visies te integreren in mijn onderzoek, zie ik de deeleconomie als “een economisch model gebaseerd op het delen van onderbenutte middelen tussen consumenten, zonder wisseling van eigenaar en uiteenlopend van plaatsen, vaardigheden en dingen, voor geldelijk en niet-geldelijk gewin via een online bemiddelingsplatform” (ter Huurne et al., 2017, p. 2). De deeleconomie kent bovendien een eigen terminologie en daarom worden in dit artikel kopers aangeduid als *consumenten*, verkopers als *aanbieders*, en kopers en verkopers gezamenlijk als *gebruikers* (Schor, 2014).

Vertrouwen in de deeleconomie

Ondanks de toename van het aantal gebruikers van de deeleconomie, zijn er wel barrières voor deelname en acceptatie. Naast factoren als onbekendheid met delen en hogere transactiekosten in vergelijking met traditionele consumptie, wordt in het algemeen een gebrek aan *vertrouwen* als belangrijkste belemmering gezien (Hawlitschek, Teubner, & Gimpel, 2016). Vertrouwen is het sleutelwoord van de deeleconomie, omdat mensen transacties aangaan met anderen die zij niet kennen. Spullen of diensten delen met onbekenden is in principe niets nieuws; carpoolen en liften is bijvoorbeeld iets wat al langer bestaat. Het verschil met vroeger is echter dat delen niet meer beperkt is tot iemands eigen sociale netwerk, maar dat het nu mogelijk is om met bijna iedereen te delen dankzij digitale technologie (Hamari et al., 2015).

De noodzaak van vertrouwen in de deeleconomie ontstaat doordat het delen met onbekenden risico's en onzekerheid met zich meebrengt. Allereerst zijn consumenten en aanbieders onzeker over elkaars werkelijke intenties, wat bijvoorbeeld kan leiden tot een veiligheidsrisico bij een fysieke ontmoeting. Ten tweede weet een consument niet of een aanbieder daadwerkelijk bepaalde diensten kan verrichten (bijvoorbeeld taxi rijden of het koken van een maaltijd). Ook maakt het online karakter van de transactie het consumenten onmogelijk om goederen vooraf in werkelijkheid te zien, wat zorgt voor onzekerheid rondom de kwaliteit van het product. Vanuit het perspectief van de aanbieder is het onzeker in welke staat en of het eigendom überhaupt terugkomt. Tot slot worden zowel de consument als de aanbieder minder beschermd door regels en voorschriften, wat leidt tot juridische onduidelijkheid en onzekerheid

over de regelgeving (Ranchordás, 2015). Vertrouwen fungeert daarom als een mechanisme dat risico's en onzekerheid verkleint en vervolgens ook de behoefte aan formele contracten (Borgen, 2001).

Vertrouwen kent vele definities en wordt door verschillende vakgebieden op een andere manier gemeten, waardoor het lastig is om resultaten uit verschillende onderzoeken te vergelijken (McKnight & Chervany, 2001). In dit artikel hanteer ik daarom de veelgebruikte definitie van Mayer et al. (1995, p. 715), die vertrouwen definiëren als “de bereidheid van iemand om zich open te stellen voor de handelingen van een ander, op basis van de verwachting dat die handelingen belangrijk zijn voor hem of haar, ongeacht het vermogen om die ander te monitoren of te sturen.” Vertrouwen wordt bepaald door een inschatting van de betrouwbaarheid van een persoon aan de hand van percepties van *competentie*, *welwillendheid* en *integriteit*. In het geval van mijn persoonlijke ervaring die ik hierboven beschreef had ik vertrouwen in Fenna dat zij de reisgids in beloofde staat zou leveren (competentie), dat ze eerlijk zou zijn ten opzichte van mij (welwillendheid) en dat ze de reisgids zou delen zoals beloofd (integriteit).

Een raamwerk voor vertrouwen

Om te begrijpen hoe vertrouwen zich ontwikkelt tussen twee gebruikers in de deeleconomie, gebruik ik het vertrouwensraamwerk van Riegelsberger et al. (2005), zie figuur 1. In mijn onderzoek weerspiegelt dit raamwerk een situatie waarin een consument (de trustor) en een aanbieder (de trustee) elkaar voor de eerste keer ontmoeten op een deelplatform. Deze situatie wordt verderop uiteengezet. Volgens het raamwerk wordt het vertrouwen van een consument beïnvloedt door eigenschappen van de context en door intrinsieke eigenschappen van de trustee. Bovendien kunnen beide eigenschappen ook zorgen voor beloningen en straffen en zodoende een aanbieder dwingen tot betrouwbaar gedrag. Om deze redenen staan deze eigenschappen centraal in mijn onderzoek. Voordat ik het raamwerk toepas op de deeleconomie zal ik eerst beide type eigenschappen beschrijven.

In het raamwerk worden drie type contextuele eigenschappen onderscheiden, namelijk *temporal*, *social*, en *institutional embeddedness* (zie ook Raub & Weesie, 2000; Weesie et al., 1998). *Temporal embeddedness* verwijst naar de mogelijkheid dat een interactie zich in de toekomst herhaalt en is daarom een prikkel voor de trustee om zich betrouwbaar te gedragen. Dit effect staat ook wel bekend onder het *shadow of the future effect* (Axelrod, 1984). *Social embeddedness* slaat op de beschikbaarheid van informatie over het gedrag van een trustee in het netwerk van de trustor. Deze informatie wordt ook wel reputatie genoemd en informeert een trustor over het gedrag van een trustee uit het verleden, maar vormt ook een prikkel voor een trustee om toekomstige transacties veilig te stellen. Als laatste kan gesteld worden dat transacties zich afspelen in een web van instituties.

Hiermee bedoel ik organisaties zoals deelplatformen. Door middel van institutional embeddedness kan betrouwbaar gedrag van een trustee worden afgedwongen door het dreigen met sancties (bijvoorbeeld het uitsluiten van een aanbieder van een platform), maar het kan ook als een vertrouwenssignaal dienen als een organisatie bijvoorbeeld zorgvuldig zijn leden selecteert.

Intrinsieke eigenschappen zijn verbonden met een trustee en kunnen betrouwbaar gedrag verklaren wanneer een trustee niet gedwongen wordt tot dit gedrag door andere factoren (zoals beloningen en sancties). In het raamwerk worden drie type intrinsieke eigenschappen onderscheiden, namelijk competentie, geïnternaliseerde normen en welwillendheid. Dit onderscheid komt overeen met de eerder genoemde percepties van betrouwbaarheid. Competentie is het geloof van een trustor dat een trustee in staat is om een bepaalde taak uit te voeren. Met geïnternaliseerde normen wordt verwezen naar de intrinsieke motivatie van een trustee om ter goeder trouw te handelen, ook wanneer de rationele optie is om onbetrouwbaar gedrag te vertonen. Ten slotte kan een trustee ook betrouwbaar gedrag laten zien door zich welwillend op te stellen ten opzichte van een trustor. In dat geval is het niet de verwachting van een trustor dat gedrag wederkerig is of met gelijke munt wordt betaald.

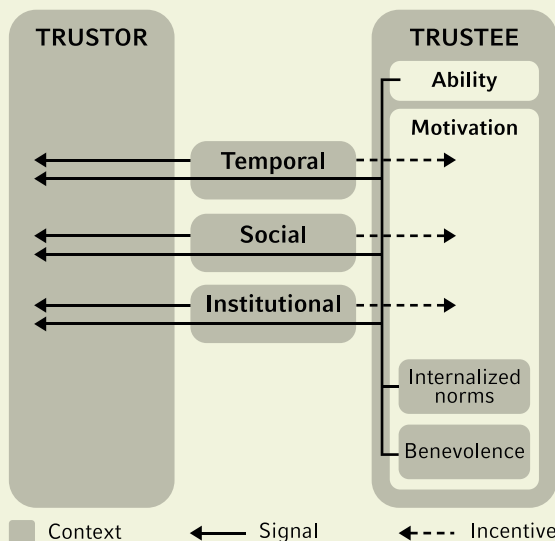
Het raamwerk helpt te begrijpen hoe vertrouwen tot stand komt door algemene principes te identificeren die leiden tot betrouwbaar gedrag. Het is echter onduidelijk hoe in de deeleconomie de overtuigingen van een trustor met betrekking tot de contextuele en intrinsieke eigenschappen van een trustee tot stand komen. Daarom pas ik in de volgende paragraaf het raamwerk toe op de deeleconomie.

Toepassing van het raamwerk op de deeleconomie

In deze paragraaf beschrijf ik drie unieke karakteristieken van de deeleconomie en gebruik ik het raamwerk om te bekijken welke vragen hieruit voort komen.

Ten eerste laat het raamwerk zien dat er twee voorname redenen zijn om iemand te vertrouwen. De eerste is dat de ander een goedaardig persoon is met hoge normen en waarden (dat wil zeggen, de intrinsieke eigenschappen van de trustee). De tweede reden is dat de ander wordt gedreven door beloningen en sancties die maken dat de ander betrouwbaar gedrag zal vertonen (dat wil zeggen, de contextuele eigenschappen). Het bijzondere aan de deeleconomie is dat er marktplaatsen zijn ontstaan waar vooral goedaardige aanbieders aanwezig zijn. Een voorbeeld hiervan is *Thuisafgehaald*, een maaltijdendeelplatform waar gebruikers vooral deelnemen vanwege prosociale redenen. Men zou kunnen verwachten dat een aanbieder op zo'n type platform enkel en alleen te vertrouwen is op basis van zijn/haar intrinsieke eigenschappen. Dit roept de vraag op in welke mate consumenten nog gebruikmaken van een vertrouwensmechanisme dat uitgaat van belonen en sanctioneren. Zo'n type vertrouwensmechanisme dat

alom wordt gebruikt in de deeleconomie is reputatie (social embeddedness). In de eerste deelstudie onderzoek ik daarom of een trustor reputatie ook gebruikt in een situatie waar hij/zij er vanuit kan gaan dat een trustee te vertrouwen is vanwege zijn intrinsieke eigenschappen.



Figuur 1. Het vertrouwensraamwerk van Riegelsberger et al. (2005).

Ten tweede speelt het online profiel van aanbieders een belangrijke rol in het overbrengen van intrinsieke trustee-eigenschappen. Dit online profiel bevat verschillende signalen (bijvoorbeeld een profielfoto, reputatie en een zelfbeschrijving), maar signalen moeten gemakkelijk te maken zijn door betrouwbare actoren en tegelijkertijd moeilijk om te maken door onbetrouwbare actoren om daadwerkelijk effectief te zijn. Ineffectieve signalen daarentegen zijn gemakkelijk te kopiëren door onbetrouwbare actoren en maken het daardoor lastig om betrouwbare en onbetrouwbare actoren van elkaar te onderscheiden. Deze signalen worden respectievelijk ook wel kostbare en goedkope signalen genoemd.

De zelfbeschrijving van een aanbieder is zo'n goedkoop signaal, omdat het gemakkelijk is om te liegen in een tekst en eenvoudig om aan te passen. Het is van belang om te weten in hoeverre een zelfbeschrijving bijdraagt aan de gepercipieerde betrouwbaarheid, omdat het een bruikbaar marketinginstrument voor een aanbieder kan zijn. Desondanks is in tegenstelling tot andere profielsignalen, nog niet eerder onderzocht in hoeverre een zelfbeschrijving bijdraagt aan de betrouwbaarheid van een aanbieder. De tweede deelstudie onderzoekt daarom wat de invloed is van taalgebruik in de zelfbeschrijving van een aanbieder op zijn/haar betrouwbaarheid.

Als laatste kan gesteld worden dat delen met anderen voorheen beperkt bleef tot iemands eigen sociale netwerk. De deeleconomie heeft het delen verder uitgebreid naar andere netwerken ver buiten iemands eigen sociale netwerk. Dankzij dit vergrote bereik zijn er groepen gebruikers ontstaan die via deelplatforms met elkaar verbonden zijn. Delen kan tussen gebruikers sterke banden en een gemeenschapsgevoel teweegbrengen, en bovendien kan het lid worden van een gemeenschap zorgen voor sterke overtuigingen, waarden en collectieve verantwoordelijkheid (Celata et al., 2017). Het is bekend van andere gemeenschappen (zoals sportclubs of wijken) dat een gemeenschapsgevoel kan zorgen voor onderling vertrouwen. Wanneer iemand de gemeenschap als geheel vertrouwt, kan dit overslaan naar individuele leden van de gemeenschap. In dat geval kan vertrouwen in de organisatie van invloed zijn op interpersoonlijk vertrouwen (institutional embeddedness). Daarnaast benadrukken deelplatforms vaak de rol van de gemeenschap in hun marketingstrategie, als een reden om een ander op het platform te vertrouwen. Verrassend genoeg is de rol van de gemeenschap in relatie tot vertrouwen vooralsnog onderbelicht gebleven in de literatuur over de deeleconomie. De derde deelstudie onderzoekt daarom in hoeverre gebruikers van deelplatformen een gemeenschapsgevoel ervaren en of dit gevoel ook onderling vertrouwen beïnvloedt.

RESULTATEN VAN DE DEELSTUDIES

De resultaten van de drie deelstudies worden kort in deze paragraaf besproken.

Deelstudie 1: Wat is de invloed van reputatie op vertrouwen in sociaal gedreven transacties?

In deze studie (ter Huurne, Ronteltap, Guo, Corten, & Buskens, 2018) werd het effect van reputatie op vertrouwen onderzocht in een marktplaats met voornamelijk goedaardige aanbieders. Dit zijn aanbieders waarvan verondersteld wordt dat ze handelen uit welwillendheid en zorg voor het algemeen welzijn (Achrol & Gundlach, 1999) en dus bij voorbaat kunnen worden vertrouwd op basis van hun prosociale motivatie. Thuisafgehaald aanbieders zijn als goedaardig te kwalificeren, omdat zij vooral meedoen vanwege intrinsieke redenen, zoals het delen van hun kookkunsten met anderen en het ontmoeten van buurtgenoten (Dagevos & Veen, 2018). Bovendien is het onmogelijk om veel geld te verdienen via Thuisafgehaald, omdat het verkopen van maaltijden niet schaalbaar is en het tegen de gedragscodes van Thuisafgehaald ingaat.

Aan de hand van transactiegegevens van Thuisafgehaald, werd vertrouwen gemeten door middel van geslaagde transacties (dat wil zeggen werd een maaltijd met succes gedeeld of niet) en de prijs van een maaltijd. Reputatie werd gemeten aan de hand van de hoeveelheid bedankjes die een aanbieder ontving

van consumenten na afloop van een transactie. Ik verwachtte en constateerde dat de reputatie van een aanbieder positief samenhang met zowel het aantal gedeelde maaltijden als de prijs van een maaltijd. Ook vond ik bevestiging voor de hypothese dat het effect van reputatie op de waarschijnlijkheid van het delen van een maaltijd afneemt als er aanvullende informatie (zoals een profielfoto en profielbeschrijving) aanwezig is.

De bevindingen van dit onderzoek herbevestigen dat reputatie het vertrouwen tussen actoren verhoogt. De resultaten dragen bovendien bij aan het begrip van reputatie, doordat reputatie niet alleen van invloed is bij economisch gedreven uitwisselingen, maar ook effect heeft op vertrouwen in de context van sociaal gedreven uitwisselingen. Daarnaast vond ik bewijs voor het bestaan van een *informatie-effect*, wat inhoudt dat het effect van reputatie afhangt van de al aanwezige hoeveelheid profielinformatie. Omprecieste zijn: het effect van reputatie op het delen van een maaltijd neemt af wanneer een profiel informatie bevat, zoals een foto en een zelfbeschrijving, en neemt toe wanneer die informatie ontbreekt.

Deelstudie 2: Wat is de invloed van taalgebruik op de betrouwbaarheid van een aanbieder?

Om meer inzicht te krijgen in de manier waarop een zelfbeschrijving vertrouwen beïnvloedt, onderzocht ik de invloed van taalgebruik in de zelfbeschrijving van een aanbieder op zijn of haar gepercipieerde betrouwbaarheid. Daarmee draagt deze studie (ter Huurne, Moons, Ronteltap, Corten, & Buskens, 2018) bij aan de kennis van taalgebruik in transacties tussen gebruikers in de deeleconomie. Tot slot onderzocht ik of gepercipieerde betrouwbaarheid verband houdt met feitelijke verkopen.

Om de genoemde onderzoeksdoelen te beantwoorden, werd aan Thuisafgehaald-gebruikers gevraagd om de betrouwbaarheid van Thuisafgehaald-aanbieders te scoren op basis van hun profielbeschrijvingen. Taalkundige kenmerken werden theoretisch gelinkt aan de betrouwbaarheidsdimensies competentie, welwillendheid en integriteit. De taalkundige kenmerken werden geanalyseerd door middel van het tekstanalyseprogramma LIWC (Tausczik & Pennebaker, 2010).

Het bleek dat taalkundige kenmerken in zelfbeschrijvingen inderdaad effect hebben op de gepercipieerde betrouwbaarheid van een aanbieder. Meer in het bijzonder bleek dat taalgebruik in samenhang met informatierijkheid, competentie, welwillendheid en integriteit de onzekerheid van een consument deed afnemen en bijdroeg aan de gepercipieerde betrouwbaarheid van aanbieders. Verder hing de gepercipieerde betrouwbaarheid van een aanbieder positief samen met zijn of haar verkopen. Deze resultaten illustreren dat een zelfbeschrijving een belangrijk middel is voor een aanbieder om zijn gepercipieerde betrouwbaarheid te beïnvloeden. Bovendien kan een goed ontwikkelde zelfbeschrijving bijdragen aan het verkoopsucces van een aanbieder.

Deelstudie 3: Hebben gemeenschapsgevoelens invloed op vertrouwen?

Dit onderzoek (ter Huurne, Ronteltap, & Buskens, in press 2019) draagt op drie manieren bij aan de literatuur over vertrouwen en de deeleconomie. Allereerst wordt het niveau van gemeenschapsgevoel op twee verschillende deelplatforms beschreven, om zo te doorgronden in hoeverre de gebruikers die verbondenheid ervaren. Ten tweede is onderzocht in hoeverre een gemeenschapsgevoel effect heeft op het vertrouwen in andere gebruikers van het platform. Tot slot werd bekeken of er een verschil is tussen consumenten en aanbieders voor wat betreft hun mate van gemeenschapsgevoel, zodat er rekening kon worden gehouden met de verschillende rollen die mensen kunnen hebben op deelplatforms.

Gebruikers van twee deelplatforms zijn ondervraagd, Airbnb en SabbaticalHomes, die zich beide richten op het delen van accommodaties, maar waarvan werd verwacht dat ze zouden verschillen in de mate waarin ze zich identificeren met andere gebruikers. SabbaticalHomes is vooral gericht op mensen met een academische achtergrond, terwijl Airbnb een algemener publiek aanspreekt. In de vragenlijst werden de volgende constructen gemeten: gemeenschapsgevoel, sociale identificatie met andere gebruikers en het platform, de behoefte aan informatie van anderen en het vertrouwen in andere gebruikers. In de analyses werd gecontroleerd voor demografische variabelen, ervaring met het platform, vertrouwen in het platform en de neiging tot vertrouwen.

Allereerst bleek dat de gebruikers van SabbaticalHomes een significant groter gemeenschapsgevoel hebben dan de gebruikers van Airbnb. Dit wijst erop dat deelplatforms met gebruikers die kenmerken delen, hoger scoren op gemeenschapsgevoel. Verder werd ook een significant verschil in gemeenschapsgevoel gevonden tussen aanbieders en consumenten op beide platforms, wat erop duidt dat aanbieders een groter gemeenschapsgevoel ervaren dan consumenten. Echter, wanneer gecontroleerd werd voor de achtergrondkenmerken van gebruikers bleek er in het geval van SabbaticalHomes geen significant verschil meer te bestaan tussen aanbieders en consumenten. Tot slot vond ik onderbouwing voor de hypothese dat gemeenschapsgevoelens inderdaad een positieve invloed hebben op het vertrouwen in andere gebruikers. Deze bevinding sluit aan bij onderzoek over andersoortige gemeenschappen, wat erop wijst dat deelplatforms in dit opzicht niet afwijken.

CONCLUSIE

Vertrouwen wordt in het algemeen erkend als een van de belangrijkste factoren voor succesvolle transacties in de deeleconomie. Tot op heden is er echter nog weinig bekend over de redenen die mensen hebben om onbekenden in deze

context te vertrouwen. Daarom ging ik in dit artikel op zoek naar contextuele en intrinsieke eigenschappen die zorgen voor vertrouwen tussen gebruikers in de deeleconomie. De onderzoeksvraag die ik hierbij trachtte te beantwoorden was *Via welke contextuele en intrinsieke trustee-eigenschappen wordt het vertrouwen van een trustor in een trustee beïnvloed in de deeleconomie?* Aan de hand van de resultaten van de drie verschillende deelstudies bespreek ik hier een aantal overkoepelende conclusies.

Om terug te keren naar de anekdote van het begin van dit artikel, kunnen we nu beter begrijpen waarom ik Fenna vertrouwde en zij mij. Zoals uit de verschillende deelstudies blijkt spelen zowel contextuele en intrinsieke eigenschappen een rol in het creëren van vertrouwen tussen gebruikers. Contextuele eigenschappen kunnen een stimulans bieden voor Fenna om betrouwbaar te zijn (bijvoorbeeld ze kan zich zorgen maken om haar reputatie) en haar Peerby lidmaatschap kan ook bijdragen aan haar betrouwbaarheid. Daarnaast had ik ook informatie nodig over haar intrinsieke eigenschappen om te weten met wat voor een persoon ik te maken had. Om meer in detail te gaan zal ik de contextuele en intrinsieke eigenschappen bespreken die onderzocht zijn in de verschillende studies.

Ten eerste is gebleken dat reputatie een belangrijk vertrouwenssignaal is, zowel in een economische als in een sociale context. Dit geeft aan dat ongeacht de context waarin we ons bevinden, de mening van anderen er toe doet en we niet alleen maar afgaan op onze inschatting van de intrinsieke eigenschappen van de ander. Sommige platformen in de deeleconomie (bijvoorbeeld Peerby) laten echter zien dat een reputatiesysteem niet per se nodig is om voor vertrouwen te zorgen. Een reden zou kunnen zijn dat in het geval van Peerby geld geen rol speelt en het risico voor de trustor daardoor lager is. Een hoger risico zou het belang van reputatie juist doen toenemen, omdat de trustor in dat geval meer zekerheid wil en dus ook de mening van anderen in acht neemt. Bovendien biedt een reputatiesysteem ook de mogelijkheid om te sanctioneren. Toekomstig onderzoek zou deze veronderstelling kunnen toetsen.

Ten tweede vond ik een interactie-effect tussen reputatie en de hoeveelheid profielinformatie van een aanbieder. Het effect van reputatie op vertrouwen bleek af te nemen wanneer een aanbieder meer profielinformatie toont. Dit suggereert dat de mening van anderen er minder toe doet wanneer er meer informatie aanwezig is over de intrinsieke eigenschappen van de trustee. De relatie tussen profielinformatie en reputatie op vertrouwen speelt ook een rol in onderzoek naar discriminatie in de deeleconomie (bijvoorbeeld Laouénan & Rathelot, 2017). Het is daarom belangrijk dat aanbieders het belang inzien van profielinformatie, zeker wanneer zij nog geen reputatie hebben opgebouwd.

Ook het taalgebruik in een zelfbeschrijving van een aanbieder kan zijn/haar betrouwbaarheid beïnvloeden, hoewel het een goedkoop signaal is. Een aanbieder kan via zijn/haar zelfbeschrijving een beeld overbrengen van zijn/haar intrinsieke eigenschappen en consumenten lijken hier ook op te reageren. Dit laat zien dat zowel goedkope als kostbare signalen een rol spelen in het creëren van vertrouwen tussen gebruikers.

Als laatste vond ik dat wanneer gebruikers gemeenschapsgevoelens ervaren met andere platformgebruikers, dit voor vertrouwen tussen platformgebruikers kan zorgen. Wanneer iemand een bepaalde groep vertrouwt, kan het lidmaatschap van zo'n groep een indicator worden voor zijn/haar betrouwbaarheid. Een vertrouwenswaardig platform kan daarom als een merk dienen, wat voor onderling vertrouwen tussen gebruikers kan zorgen.

Het gemeenschapsgevoel bleek echter wel afhankelijk te zijn van het type platform en de rol die een gebruiker heeft. Ten eerste is er een sterker gemeenschapsgevoel voor platforms waar gebruikers zich sterker met elkaar identificeren. Een mogelijke verklaring hiervoor is dat gebruikers makkelijker relaties aangaan met mensen die op hen lijken, ook wel het *homophily-effect* genoemd (McPherson et al., 2001).

Daarnaast ervaren aanbieders een groter gemeenschapsgevoel dan consumenten. Een mogelijke verklaring hiervoor is dat zij meer afhankelijk zijn van een platform, omdat het een bron van inkomsten voor hen vormt en ze daardoor meer geïmmiteerd zijn. Het verschil tussen aanbieders en consumenten voor SabbaticalHomes gebruikers verdween echter wanneer gecontroleerd werd voor individuele achtergrondkenmerken. Dit kan betekenen dat de rol van een gebruiker voor meer homogene platforms niet relevant is in tegenstelling tot meer heterogene platforms. Teruggrijpend op het *homophily-effect*, zou het kunnen zijn dat dit effect het verschil in afhankelijkheid van het platform overbrugt en voor gemeenschapsgevoel zorgt.

Implicaties voor theorie en praktijk

De resultaten van de verschillende deelstudies hebben verschillende implicaties voor de theorie en praktijk. Vanuit een theoretisch perspectief laat dit onderzoek zien welke mechanismen vertrouwen creëren in de deeleconomie. Ten eerste blijkt dat naast kostbare signalen ook goedkope signalen bijdragen aan iemands betrouwbaarheid in een online context. Dit is opmerkelijk want volgens de signaaltheorie zijn goedkope signalen niet effectief in het creëren van vertrouwen, omdat ze makkelijk te kopiëren zijn. Het kan zijn dat dit type signalen toch kostbaar zijn voor een trustee, want zodra een trustee liegt in zijn zelfbeschrijving kan hij achteraf worden gestraft door bijvoorbeeld een lagere beoordeling van een consument. Ten tweede kunnen deelplatformen worden

beschouwd als een nieuw type gemeenschap dat is ontstaan naast al bestaande gemeenschappen. Niettemin zijn deze deelgemeenschappen te karakteriseren als *lichte gemeenschappen* (Hurenkamp & Duyvendak, 2008), omdat het makkelijk is om er lid van te worden en het lidmaatschap ook makkelijk weer is op te zeggen. Deelgemeenschappen passen daarmee in een grotere trend waar mensen zich informeel organiseren in plaats van dat ze *radicale individualisering* nastreven (Hurenkamp & Duyvendak, 2008).

Vanuit een praktisch oogpunt heeft dit onderzoek ook enkele consequenties. Vooropgesteld moet worden dat het niet enkel draait om het verhogen van vertrouwen tussen gebruikers, maar dat het vooral gaat om het verhogen van gerechtvaardigd vertrouwen. Het zou immers mogelijk kunnen zijn om een platform zo in te richten dat een consument vertrouwen geeft aan aanbieders die dat niet verdienen. Hoewel dit nooit helemaal te voorkomen is, is het belangrijk om de mechanismen achter vertrouwen te begrijpen in plaats van alleen bepaalde vertrouwenssignalen te implementeren. Een voorbeeld van zo'n vertrouwensmechanisme is *institutional embeddedness*, wat bewerkstelligt kan worden door het verhogen van het gemeenschapsgevoel op een platform. Platformeigenaren doen er daarom goed aan om te investeren in de gemeenschapszin door bijvoorbeeld de participatie van hun gebruikers te verhogen.

Aanbevelingen voor toekomstig onderzoek

Dit onderzoek opent nieuwe wegen voor toekomstig onderzoek. Ten eerste richtte dit onderzoek zich op contextuele en intrinsieke eigenschappen en bijbehorende signalen in de deeleconomie. Echter, er zijn meerdere typen markten waar vertrouwen tussen onbekenden via online platforms moet worden ontwikkeld, denk bijvoorbeeld aan online dating platforms. Het is niet duidelijk of de inzichten van dit onderzoek ook direct toepasbaar zijn in andersoortige markten, omdat bijvoorbeeld risico's tussen markten kunnen verschillen. Toekomstig onderzoek zou daarom de gevonden resultaten kunnen testen in andere contexten om zo de toepasbaarheid en mogelijke grenzen van de vertrouwensmechanismen op te zoeken. Daarnaast is dit onderzoek uitgevoerd onder gebruikers van de deeleconomie. Om het aantal deelnemers aan de deeleconomie te vergroten zou het onderzoek ook gerepliceerd moeten worden onder niet-gebruikers. Niet-gebruikers kunnen namelijk minder ervaring hebben in het vertrouwen van onbekenden via online platforms en daarom anders reageren op bepaalde vertrouwenssignalen. Als laatste wordt aanbevolen om ook expliciet het vertrouwen van aanbieders in consumenten te onderzoeken. Dit onderzoek heeft met name de nadruk gelegd op de aanbieder als trustee, terwijl in tweezijdige markten de consument ook als trustee kan fungeren.

Afsluitend kan geconcludeerd worden dat dit onderzoek een nieuwe kijk heeft verschaft in het fenomeen van vertrouwen tussen gebruikers in de deeleconomie. Door de contextuele en intrinsieke eigenschappen en bijbehorende signalen te bestuderen, zijn nieuwe inzichten opgedaan. Gebaseerd hierop zijn enkele theoretische en praktische implicaties gegeven evenals suggesties voor toekomstig onderzoek. Ik hoop hiermee een tipje van de sluier te hebben opgelicht op de vraag waarom gebruikers elkaar vertrouwen in de deeleconomie.

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DANKWOORD

Mijn interesse voor de deeleconomie werd gewekt door een anekdote van de Amerikaanse denker Douglas Rushkoff in een uitzending van VPRO Tegenlicht.¹⁹ Hij vertelde daarin over zijn jeugd in de New Yorkse wijk Queens waar op vrijdags een barbecue in elkaar werd geknutseld en de hele buurt samen kwam om met elkaar te eten. Omdat zijn vader carrière maakte, verhuisde het gezin naar een rijkere buitenwijk in New York met vrijstaande huizen. Het verschil met zijn oude buurt was, dat in plaats van samen met de burens te barbecueën, elk gezin zijn eigen barbecue had en alleen stond te barbecueën. Waar de barbecue eerst mensen samenbracht, werd het nu een individuele aangelegenheid. De gestegen welvaart was dus goed voor de economie (iedereen zijn eigen barbecue), maar slecht voor de gemeenschap (minder sociaal contact).

Hoewel wat naïef, werd in die uitzending de deeleconomie gepresenteerd als een mogelijk antwoord om economie en gemeenschap met elkaar te verbinden. Want waar volgens de Belgische psychiater Dirk de Wachter mensen echt behoefte aan hebben is *verbondenheid*. Hij verwoordt dit verlangen als “L’enfer c’est le manque des autres”, oftewel, de hel is het ontbreken van de ander. Over het promoveren kan ik daar nu aan toevoegen “Passer son doctorat est un enfer sans les autres”. Ik heb me gedurende mijn promotie verbonden gevoeld met vele mensen die allemaal een unieke bijdrage hebben geleverd en aan wie ik dank verschuldigd ben.

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¹⁹ De VPRO Tegenlicht uitzending is terug te zien via <https://youtu.be/CeEADN8eocY>

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Also, I would like to express my sincere gratitude to Harrison McKnight. He provided a position for me as a visiting scholar at Michigan State University, which enabled me to expand my horizon as a researcher. It was a privilege to learn from him and discuss my research with such an eminent expert in the field of trust. Additionally, I thank Julian Guo for his statistical expertise and helpful advice.

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Maarten,
Utrecht

CURRICULUM VITAE

Maarten ter Huurne was born in Enschede, The Netherlands, on February 9th, 1982. In 2005, he obtained his Master's degree in Business Administration, followed by his Master's degree in Communication Studies in 2006, both from the University of Twente. After his studies, he worked in the field of marketing for several organisations: first for a Dutch university, after which he assumed a position at an information technology company. In 2012, he started working as a lecturer for the University of Applied Sciences Utrecht (HU). He taught courses in communication, marketing, and research skills, and provided guidance for students on their bachelor thesis. Maarten started his PhD in 2015 at the Department of Sociology at Utrecht University under the supervision of Vincent Buskens, Rense Corten, and Amber Ronteltap (HU). During his PhD, he was a visiting scholar at Michigan State University for two months to collaborate with Harrison McKnight. His work has appeared in the *Journal of Consumer Behaviour*, and *Tourism Analysis*, among others.

LIST OF PUBLICATIONS

ter Huurne, M. (2018). Vertrouwen en vertrouwd worden in de deeleconomie. *TPEdigitaal*, 13(2), 1–14. Retrieved from <http://www.tpedigitaal.nl/artikel/vertrouwen-en-vertrouwd-worden-de-deeleconomie> (The Dutch summary in this dissertation)

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“Writing a book is a horrible, exhausting struggle, like a long bout with some painful illness. One would never undertake such a thing if one were not driven on by some demon whom one can neither resist nor understand.”

George Orwell

