ACCOUNTING FOR THE SOCIAL ELEMENT IN ACCESS-BASED CONSUMPTION

by

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A DISSERTATION

Presented to the Department of Marketing and the Graduate School of the University of Oregon in partial fulfillment of the requirements for the degree of Doctor of Philosophy

September 2014
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Title: Accounting for the Social Element in Access-Based Consumption

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Degree awarded September 2014
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DISSERTATION ABSTRACT

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Doctor of Philosophy

Department of Marketing

September 2014

Title: Accounting for the Social Element in Access-Based Consumption

This dissertation examines how the inclusion of the social element in access-based consumption can influence affective and behavioral responses. The first essay builds upon the dimensions proposed by Bardhi and Eckhardt who found that market mediation, anonymity, temporality, consumer involvement, type of accessed object and political consumerism are key dimensions on which to study access-based consumption. A reconceptualization of these dimensions is proposed in the current work to incorporate the social element. Foremost, a separation of renting and sharing based on the presence or absence of economic exchange is proposed. The implications for the remaining dimensions of anonymity, temporality, consumer participation, type of accessed object, political consumerism and governance are then discussed. Finally, key outcome variables of community, cooperation, loneliness and contagion are reviewed.

In Essay 2, the guiding theory of social distance is used to empirically test the impact of the social element on evaluations of a rental service on the outcomes of satisfaction, attitude, disgust and community. In the rental context examined, users are interpersonally anonymous indicating that there is no relationship between the current user and other users. In addition, users must engage in extra-role behaviors because no intermediaries are present. In three experiments, it is shown that encounters with other
users can lead to increased feelings of disgust and decreased satisfaction and attitude
towards the rental service. Having information about other users, provided in the form of
avatar images, can enhance feelings of community, as can certain types of
communication between users. Given the benefits that emerge from feelings of
community, Essay 3 explores factors that can enhance or detract from sense of
community. Factors such as apathetic participation and similarity are considered. In
addition, positive outcomes that emerge from feelings of community, such as sign-up
likelihood and care behaviors, are measured.
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I am grateful for the guidance I have received from the members of my committee. I would also like to thank the faculty and other students in the program for all the help and suggestions you have provided. This research is better because of your feedback. I am also thankful for the number of friends who have offered support and encouragement throughout the process of pursuing my dissertation and ensured that I still managed to find time to have some fun.
Dedicated to my parents, Mike and Judi, and sister, Kelly, whose encouragement, love
and support made this possible. You have always been my biggest cheerleaders and I am
grateful for everything you have given me.

Upon acceptance to the UO program, my mom exclaimed that I would one day be a
“Quack Doctor” due to getting a PhD from a school with a the Duck mascot. I know she
is looking down from heaven and is so proud of this accomplishment.
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CHAPTER I
RECONCEPTUALIZING THE DIMENSIONS OF ACCESS-BASED CONSUMPTION

INTRODUCTION


The companies listed are a small section of the ones which have emerged in recent years as part of the collaborative consumption economy. Collaborative consumption, a term developed by Botsman and Rogers (2010), is defined as “the new ways that technology is enabling sharing, bartering, lending, trading, renting, gifting, and swapping in ways never previously possible.” In The Mesh (2010), Gansky describes how opportunities are emerging for businesses to use technology platforms to provide people with products on an as needed basis without the burden of ownership. Collaborative consumption describes a shift in consumer preference where consumers are forgoing ownership of certain items, such as cars, tools or clothing, and instead simply seeking access to these items when needed. In a recent report, 35% of 13-to-34-year-olds
surveyed indicated they would rather pay full price to access an item when it is needed instead of paying full price to own the same item (Cassandra Report 2014). This statistic demonstrates a momentous shift in consumer mindset, particularly among the Generation Y demographic. The shift in consumption was foreseen as early as 1973, when Berry and Maricle suggested that in the future consumers would likely choose to rent all types of complex products rather than deal with the burdens of ownership. The mentality is driven by the recognition of “I do not want a drill, I want a hole” and technology platforms now exist to make instantaneous connections between supply and demand and meet consumer needs and wants.

Recent books in the popular press are descriptive of the change occurring in society and provide information for businesses seeking success in the collaborative consumption marketplace. Collaborative consumption represents a change in consumption behaviors. To offer perspective on the size of this movement, Fast Company estimated in 2013 alone that peer-to-peer renting between consumers was a $26 billion business, $5 billion of which consisted of peer-to-peer lending. Investors have also indicated support with $67 billion invested between 2011 and 2013 in companies operating in the collaborative consumption sphere. Clearly, there is demonstrable interest from both businesses and consumers to providing alternatives to ownership.

Culturally, however, America has been an ownership society. Americans are taught from a young age that buying “stuff” leads to personal happiness. Buying is also considered good for the economy and the country. In fact, our country’s standard of living is related to purchases as it is measured in gross domestic product (GDP), or the market value of all goods and services produced within a country in a year (World Bank).
After the terrorist attacks of 9/11, demonstrating support for the country meant returning to shopping malls and making purchases. However, evidence from multiple sources suggests that the planet simply cannot support consumption at its current pace. The United States alone is responsible for creating approximately 25% of the world’s household and commercial waste (United States Environmental Protection Agency 2005). People around the world often indicate aspirations to live the “American dream” but it is not possible for everyone to consume at current American standards or pace. American consumption levels are energy and resource intensive and lead to creation of significant waste (Mont 2004). Carl Safina’s (2011) research suggests that 2.5 Earths would be needed if everyone in the world were to have the living standards of Americans. The world’s finite resources are already stretched to their breaking point and nearing depletion according to ecological reports and climate change is now irreversible (Intergovernmental Panel on Climate Change 2014; United Nations Environment Programme 2014). In order to accommodate population growth and to suppress the problems associated with climate change, alternatives to current consumption patterns are needed. Collaborative consumption is one viable alternative as it allows for usage of personal resources that would otherwise remain idle.

An interest in understanding what influences attitudes and behavior in the collaborative consumption realm, with specific emphasis on the impact of the social element in renting and sharing, fuels motivation for the current research.

Although sharing has always existed in societies, technology now allows for sharing to occur on a scale never before seen. Instead of just sharing with known others, the Internet provides worldwide reach allowing sharing to transpire between unknown
others. For example, the Creative Commons is a global nonprofit organization that enables sharing of copyrighted knowledge and material under terms set by the original author. Sharing these copyrighted works permits people around the world to build upon, enhance or improve the work of others, collaborating to move research forward or allowing free access to material. Technology is also influential the rental domain. The use of smart phones and wireless technology now allows for almost instantaneous uniting of supply and demand. For example, if a person has a layover in San Francisco, it is possible to check online availability upon landing, find a car that someone out of town has available to rent at the airport and rent that for a few hours through an app on a smartphone rather than dealing with the traditional car rental company model and their associated regulations, fees and insurance. The entire transaction is completed online in minutes. This is only one example of a company finding new ways to utilize idle resources in a way that benefits both suppliers and demanders. Choosing to rent or share instead of owning marks a substantial break from tradition which can heighten consumer risk and uncertainty, especially to those who are new to this type of consumption or have never engaged in this type of consumption with unknown others. One category of access-based consumption allows for the renting or sharing of an accessed object by multiple people who are unknown to each other yet still impact other users’ experiences. In this research, an accessed object simply refers to an object used by multiple people where no change in ownership occurs.

This essay argues that social elements are of particular importance for access-based consumption behaviors of renting and sharing. Access-based consumption is a particular type of collaborative consumption that refers only to renting and sharing. It is
defined as “transactions that may be market mediated in which no transfer of ownership takes place” (Bardhi and Eckhardt 2012, 881). Researchers Bardhi and Eckhardt (2012) originally developed six dimensions of access-based consumption: market mediation, temporality, anonymity, consumer involvement, type of object and political consumerism. Even though Bardhi and Eckhardt do not directly incorporate a social element into their dimensions, it is alluded to in the qualitative work of their article. For example, when asked about following the rules established by Zipcar (a short-term car rental company) one of their respondents said “I notice the gas level, because you get fined if you leave it underneath a quarter tank. But if it’s at a quarter tank, that’s for the next person.” Another respondent indicated that although he sees other users in the parking lot, he does not feel a connection to them simply because they all use the same car rental service (p. 12). Other users are clearly noticed and impact the next user’s experience even though a social element is not explicitly accounted for in the dimensions Bardhi and Eckhardt specify.

With the importance of this omission in mind, proposed integration of the social element leads to a reconceptualization of the original six Bardhi and Eckhardt dimensions. It is argued that their dimension of market mediation must be dropped in favor of a return to a categorization based not on market mediation, but on economic exchange. The return to renting and sharing, as behaviors having economic exchange or not, then allows clear distinctions regarding the role of social elements that were not previously addressed by Bardhi and Eckhardt (2012). The resulting conceptualization accounts for the social element with dimensions of 1) anonymity, 2) temporality, 3) consumer participation which is a re-naming of their dimension of consumer
involvement, 4) type of accessed object, and 5) political consumerism, and 6) governance which is a newly proposed dimension. Table 1 shows the original dimensions next to the conceptualization of the dimensions proposed in this essay. The ensuing dimensions are then argued to influence sense of community, cooperation, loneliness and concerns with contagion. Each dimension as described by Bardhi and Eckhardt (2012) along with relevant literature is reviewed to support the inclusion of the social element and reconceptualization of each dimension. Next, the variables influenced by each dimension are examined. Finally, implications of this research are discussed.

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**LITERATURE REVIEW**

In the marketing literature, various researchers have advocated for use of different terminology. Terms such as “peer economy” and “collaborative economy” have been used interchangeably but are in actuality indicative of different practices. Peer economy refers to “person-to-person marketplaces that facilitate the sharing and direct trade of
assets build on peer trust.” The collaborative economy refers to an economy “built on distributed networks of connected individuals and institutions versus centralized institutions, transforming how we can produce, consume, finance and learn” (Botsman 2013). Collaborative consumption and access-based consumption are also distinct from each other. Collaborative consumption encompasses sharing, bartering, lending, trading, renting, gifting, and swapping. Access-based consumption references only two types of collaborative consumption: sharing and renting. Sharing is defined as “the act and process of distributing what is ours to others for their use and/or the act and process of receiving or taking something from others for our use” (Belk 2007, 126). Durgee and O’Connor (1995, 90) defined renting as “a transaction in which one party offers an item to another party for a fixed period of time in exchange for money and in which there is no change of ownership.” What is consistent across access-based consumption is that no transfer of ownership occurs: from the consumer’s perspective, the accessed object used belongs to someone else.

Understanding the impact of the social element of renting and sharing is critical to actually understanding the behavior people engage in after choosing these modes of consumption over ownership. In this essay, the term social element is used to refer to any attitudes or behaviors influenced by others or allusion to others. The social element is necessary to consider in research on access-based consumption because it has both direct and indirect influences on how users interact with each other, how users and owners of the accessed product engage with each other and the care that users demonstrate towards the accessed object. In the next section, each dimension proposed by Bardhi and Eckhardt (2012) is clarified. Then the dimension is expanded upon, reconceptualized or newly
proposed to show differences that emerge once the dimension accounts for the social element.

**Differentiation of Market Mediation and Economic Exchange**

According to Bardhi and Eckhardt, market mediation refers to whether the entity granting access is for profit or not-for-profit. This dimension is dependent on the motivation of the owner in allowing access to the object. Not-for-profit access and peer-to-peer exchange are described as similar to sharing and for profit access as similar to renting. Using owner motivation to describe the market mediation dimension represents a gray area. Many peer-to-peer exchanges involve the exchange of money and are undertaken for profit which does not align with Bardhi and Eckardt’s description of peer-to-peer exchange as sharing. For example, many people in high rent areas rent out rooms in their homes to help with their mortgages; even though this is peer-to-peer exchange, it is still profit driven (Streitfeld 2014).

Reducing ambiguity surrounding the market mediation dimension is fundamental to clearly differentiating types of access-based consumption. To clarify, dropping the Bardhi and Eckhardt dimension of market mediation is recommended. The dimension is replaced with a categorization of the transaction as either renting or sharing. If money is exchanged, it would be categorized as renting and if no money is exchanged, it would be categorized as sharing. These terms reflect the transaction and importantly hold implications for the social nature of the resulting exchange. Differences on each of the subsequent dimensions are expected based on whether the exchange is renting or sharing.
Support for delineation based on the presence or absence of economic exchange can be found in the literature and is subsequently discussed.

**Renting: A Form of Economic Exchange**

Typically, exchanges are differentiated based on whether or not money is present or absent in the transaction. Money is “a medium of exchange and measure of value” (Innes, 1913, 377). Its value stems from its ability to be equally receivable by all members of a community, to be transferable and allows for a standard of comparison of goods. Money is the de facto way to evaluate many situations: is this salary an acceptable exchange of my time or is the price of this outfit worth the money? Money serves as a point of reference and valuation based on the exchange of one commodity for another. Blau (1964) characterized exchanges as either social exchanges or economic exchanges. If money is present in an exchange it is regarded as an economic exchange. Pure economic exchange is when a pre-specified amount of money is offered in exchange for a completion of a set of activities. Macneil (1980) further specified an exchange as a discrete transaction when money is on one side and an easily measured commodity on the other side with nothing else between the parties in the exchange now, in the future or in the past. The role of economic exchange is often examined in the managerial literature in reference to contract workers (George and Chattopadhyay 2005; Pearce 1993; Pfeffer and Baron 1988). The exchange is short-term and there are no obligations or expectations to maintain a long-term relationship (Tsui, Pearce, Porter and Tripoli 1997). Given that the
definition of renting is exchange of money for access to an object for a set time period, renting is clearly illustrative of economic exchange.

**Characteristics of Renting**

Key characteristics of renting as economic exchange involve 1) immediate reciprocity in the form of money, where a good is exchanged for time with an item, 2) lack of continuing obligation and 3) lack of communal bonds (Belk 2010). The monetary equivalent for access to an item for a specified amount of time is mutually accepted by both parties involved in the transaction. Both parties agree to stated responsibilities of care and responsibility associated with the exchange; there is no assumption that the item will receive appropriate care based on social bonds, as with sharing. Instead, formal governance structures are often used. Transactions can be and often are, one time exchanges and thus do not create social bonds between people (Durgee and O’Connor 1995). Remaining connected is unnecessary as both parties have already agreed on an exchange that is acceptable to them, indicating completion of all obligations.

Further, with renting, the expectation is that evidence of the owner or previous user of the item is absent. For example, one reason that rental cars are thoroughly cleaned and washed between users to erase evidence of prior users. Furthermore, depersonalization is expected with rentals. Belk (1988) found that people are much less willing to rent items that are personal, instead indicating preference for more generic items. The guiding principle of rental exchanges is not moored in trust and caring for the owner as it is with sharing (Dwyer, Schurr and Oh 1987). Renting is instead regarded as
an economic transaction where money is exchanged for access to an item for a set time period and at the end of time period all obligations are complete. These characteristics are quite different for sharing.

*Sharing: A Form of Social Exchange In Marketing*

When money is absent, the exchange is based on the social component of relational exchange and largely originates from trust in the other party (Macneil 1980). Indeed trust, investment, long-term orientation and socio-emotional benefits are the hallmarks of social exchanges (Shore, Tetrick, Lynch and Barksdale 2006). Economic exchanges can evolve into relationships and acquire characteristics typical of social exchange. However, the appearance of characteristics usually present in social exchange requires time for each party to demonstrate trust and commitment, the foundation of relationships (Morgan and Hunt 1994). Social exchange is often studied in the employment literature in regard to organizational commitment and obligations. The literature indicates that perceptions of greater organizational commitment between employer and employee lead to greater loyalty and willingness to go beyond contracted work duties (Allen and Meyer 1990; Konovsky and Pugh 1994; Meyer and Allen 1984; Settoon, Bennett and Liden 1996).

Economic exchanges that possess traits associated with social exchange are examined in the marketing literature under the term relationship marketing. Relationship marketing is “all marketing activities directed towards establishing, developing and maintaining successful relational exchanges” (Morgan and Hunt 1994, 23). Morgan and
Hunt propose that trust and commitment are central to relational marketing successes. Successful relationship marketing can lead to partnership stability, cooperation, amicable resolution of conflict, increased loyalty, better relationship quality, increased profitability and customer retention (Berry 1995; Crosby, Evans and Cowles 1990; Doney and Cannon 1997; Dwyer, Schurr and Oh 1987; Garbarino and Johnson 1999; Gummesson 2002; Morgan and Hunt 1994; Reichheld and Sasser 1990; Sirdeshmukh, Singh and Sabol 2002; Wilson 1995). Sheth and Parvatiyar (2002) further identify three unique aspects of relationship marketing: that it is a one-on-one relationship between marketer and customer, it is an interactive process and not simply a transactional exchange and that value is added through mutual interdependence. At its essence, relationship marketing attempts to capture the benefits often found in sharing, a relationship of social bonds built on trust and long-term orientation, and apply them to economic exchanges in hopes of achieving similar benefits such as loyalty, cooperation and better relationship quality.

**Characteristics of Sharing**

Sharing has recently received increased attention in the academic literature. Sharing has been examined through the lenses of sustainability, anti-consumption behavior, co-creation, the family, experiential events and building community (Belk 2007, 2010; Ozanne and Ballantine 2010; Ozanne and Ozanne 2011; Prothero, Dobscha, Freund, Kilbourne, Luchs, Ozanne, Thugersen 2011). Belk (2010) identifies two key prototypes for sharing behaviors. One prototype is that sharing does not come bounded with strings attached or the expectation of reciprocity. One may receive thanks and can
also expect the person with whom the item is shared to be responsible for the object and exact care for it, without the implementation of formal governance structures in the exchange. Since money is not exchanged, the value derived in the exchange for the product owner arises in the form of social currency.

The other archetype of sharing identified by Belk (2010) is that it creates linkages, in the form of social bonds between people. Sharing is grounded in relationships and social exchange. People who share with each other often have strong social ties, typically as part of a community or group that maintains connections over time. Sharing occurs among people with whom cooperation and trust exist. Shared objects are tangible representations of social ties and objects serve as a reminder of the one’s relationship with the person who shared the item. Evidence of the owner is not surprising and even expected. Social bonds may be created over time on foundations of trust and caring.

Renting and sharing are fundamentally different forms of exchange even though both are characterized as access-based consumption. The dimension of economic exchange, denoted as presence or absence of payment, should replace mediation as recommended by Bardhi and Eckhardt (2012) as the foremost dimension of access-based consumption. The relationships in sharing and renting situations originate differently and are associated with different expectations and outcomes. The different expectations are elaborated upon in discussing the following five dimensions originally proposed by Bardhi and Eckhardt (2012): anonymity, temporality, consumer involvement, type of object and political consumerism. A sixth dimension, governance, is also proposed in the current research. Each dimension is extended or reconsidered in order to address social elements of access-based consumption.
Anonymity

Anonymity is described by Bardhi and Eckhardt (2012) as comprised of two components: whether the context of use is public or private and the spatial proximity between the object and the consumer. Both of these address anonymity of usage, whether it is private or in view of others. The authors indicate that private usage allows users to maintain anonymity while public usage, either of public goods or in front of others, is social access that emphasizes connectedness with others. Spatial anonymity refers to whether the accessed item is located nearby, which can indicate greater intimacy and habitual usage, or further away from one’s space.

Anonymity of usage only accounts for one type of anonymity. Another vital type of anonymity to include in research on access-based consumption is interpersonal anonymity. Interpersonal anonymity references anonymity regarding other users and is a more traditional usage of this construct. Interpersonal anonymity is conceptualized as when an individual cannot be identified by others (Zimbardo 1969). In the case of interpersonal anonymity there is an absence of available information on which to evaluate the other users, creating enhanced reliance on stereotypes and formal mechanisms to ensure compliance. This is problematic, especially for renting, given that the stereotypes associated with people who rent are overwhelmingly negative (Durgee and O’Connor 1995). Specific outcomes, both negative and positive, are also associated with interpersonal anonymity.
Outcomes Associated with Interpersonal Anonymity

When interpersonal anonymity exists, concerns about behavior from other users, even those not present in the usage context, often arise. Interpersonal anonymity has been shown to foster anti-social behavior and reduce the regulatory function of social norms (Reicher, Spears & Postmes 1995). Findings indicate that interpersonal anonymity leads to increased likelihood of engaging in inappropriate behaviors, such as driver aggression, delivering longer shocks in a lab study, and stealing Halloween candy (Diener, Fraser, Beaman and Kelem 1976; Ellison-Potter, Bell and Deffenbacher 2001; Zimbardo 1969). Interpersonal anonymity may also contribute to social loafing, or the tendency for individuals to expend less effort when working collectively compared to when working individually because individual efforts are less attributable (Karau and Williams 1993). Bardhi and Eckhardt (2012) found overwhelming evidence of individuals acting in their own self-interest when using communal rental products and interpersonally anonymous. In interviews conducted, respondents admitted to smoking in the cars which is against stated and agreed upon rules, double parking the car, not returning lost items and only completing the bare minimum of requirements necessary for the car rental service to function. Collectively, it is apparent that the natural inclination is to engage in self-interested behaviors when interpersonally anonymous and self-interest infrequently overlaps with acting in the best interest of others.

However, interpersonal anonymity does not always lead to undesirable behaviors. Gergen, Gergen and Barton (1973) found that interpersonal anonymity simply allowed the liberation of normally inhibited behavior. Participants disclosed more intimate details
about their lives to other individuals when meeting and speaking in a dark room as
compared to speaking in a well-lit room. This finding has been replicated online in
computer-mediated communication where people who are discursively anonymous (when
personally identifying information such as name or picture are not shared) are more likely
to engage in self-disclosure (Tidwell and Walther 2002). In fact, interpersonal anonymity
may not be the driving force behind the how one acts, rather it is the interaction of
anonymity and perception of reward or punishment (Diener 1977). The outcomes
associated with interpersonal anonymity are therefore vital to consider in the context of
access-based consumption.

Interpersonal Anonymity and Access-Based Consumption

With renting, interpersonal anonymity from other users of the product is typically
high. This is true for all types of renting, from spending the night in a hotel on vacation to
renting a car for an hour or a dress for a special occasion. The prior user and the
following user are often unknown to the current user, allowing interpersonal anonymity
to remain high. Interpersonal anonymity in renting means that the ability to identify the
person responsible for any bad behavior and extract retribution is limited. Thus, as long
as bad behavior goes unreported, there is no motivation to be better behaved.

When products are shared, interpersonal anonymity towards other users or the
owner of the product is generally low. Sharing often entails asking a known other for
usage of an object they own. Even if not a close friend, the owner is often at minimum an
acquaintance. Other users of the object are therefore likely people known directly or ones
the sharer is aware of through a friend or extended community. Lack of adherence to
group norms or engaging in inappropriate behavior is usually punished through social
channels when interpersonal anonymity is low. Punishment could entail not allowing
future use of the product or letting others in the same social circle know that you are
irresponsible and cannot be trusted with shared items. Lack of adherence to group norms
can negatively impact one’s reputation within a community bounded by social ties. It is
likely that a reduction in interpersonal anonymity should lead to better behaviors by the
people who access the rented or shared object. Expanding Bardhi and Eckhardt’s (2012)
dimension of anonymity to reflect both usage anonymity and interpersonal anonymity
allows for enhanced understanding of how anonymity may influence behaviors. Another
dimension that is impacted through the inclusion of the social element is temporality.

**Temporality**

According to Bardhi and Eckhardt (2012), temporality also encompasses two
parts, duration of access and duration of usage. Temporality references the self-object
relationship, particularly whether a perceived feeling of ownership of the object develops.
For example, if a person interacts with the same object over a long period of time
(duration of usage), such as with a long-term car lease, feelings of ownership towards the
car may ensue. Feelings may develop on account of the renter engaging in activities
typically indicative of ownership rituals, such as responsibility for servicing the car and
pre-setting the radio to favorite stations. Duration of access refers to whether the access is
a singular or recurring transaction. This is exemplified by one-time usage of a rental car versus membership to a car rental service.

With sharing, the duration of access and usage may be longer or at least not predetermined. Given that sharing exchanges often originate from established relationships, there may be a degree of trust present that allows for longer periods of usage. The owner of the product trusts the sharer and finds it acceptable for the object to be used for longer periods of time because there is implicit trust that it will receive proper care. With renting, there is often no prior relationship so implicit trust regarding care of the rented object is typically absent. In addition, the transactional nature of rental exchanges clearly indicates the time of usage for the object and the expectation is the item will be returned promptly when time of access expires. The next dimension proposed by Bardhi and Eckhardt (2012) is consumer involvement and this dimension is greatly impacted by the social element as it deals with consumer-to-consumer relationships.

**Consumer Involvement Rather Than Consumer Participation**

The dimension of consumer involvement describes whether the consumption is a self-service or full service experience, as evidenced by the level of consumer co-creation (Bardhi and Eckhardt 2012). In their description, consumer involvement and co-creation represent the extent to which consumers are responsible for the care of the accessed item. The use of the term “consumer involvement” is wrought with challenges given that the term “involvement” is already highly associated with something other than co-creation in past work. In the marketing literature, involvement is typically viewed as an individual
difference variable that reflects how much a person cares and is evidenced by their search for information and the decision making process in which they engage (Laurent and Kapferer 1985; Vaughn 1980). Price tends to be the biggest factor dictating involvement level; when prices are high, risk is often heightened, leading to greater consumer involvement (Rothschild 1979). In the case of access-based consumption, price is not an indicator of involvement; in fact higher prices often dictate lower involvement given Bardhi and Eckhardt’s use of the construct.

The term co-creation is also challenging to use in this context. In the literature, co-creation is indicative of “joint creation of value by the company and the customer” (Prahalad and Ramaswamy 2004a, 8). Co-creation allows for personalization of experience to suit one’s needs (Prahalad and Ramaswamy 2004b). Co-creation also typically lowers the monetary price associated with a good or service (Fitzsimmons 1985). There are many different ways for co-creation to occur: through emotional engagement, through self-service, through a company providing an experience that a consumer participates in, when consumers use a supplier’s process to problem solve themselves or co-design of products (Payne, Storbacka and Frow 2008). Since there are any types of consumer co-creation, it may be challenging to know which specific type is referenced by Bardhi and Eckhardt’s (2012) dimension. Given that both involvement and co-creation may suggest other practices, it may be prudent to adapt the term consumer participation for the dimension to prevent confusion. Consumer participation is defined as “the degree to which the customer is involved in producing and delivering the service” (Dabholkar 1990, 484). This term is more representative of the actual extra role behaviors that consumers engage in with access-based consumption.
Extra-Role Behaviors

The amount of consumer participation required is typically quite different for renting and sharing. For example, if one rents a traditional hotel room, the renter is not responsible for cleaning the space when finished. There is no expectation for a paying guest to engage in extra-role behaviors such as cleaning. Extra-role behaviors are ones where consumers voluntarily supply labor and knowledge in the service creation process (Keh and Teo 2001). Engagement in extra-role behaviors is indicative of higher levels of consumer participation. When staying at a friend’s house, as typified with sharing, one typically is responsible for engaging in extra-role behaviors, as exemplified by removing the sheets from the bed and putting them in the washing machine upon departure. Hence, there tend to be greater levels of co-creation with sharing rather than renting. When sharing, there is often an expectation of the sharer to participate in extra-role behaviors given the social nature of this type of relationship.

One way to assess whether consumers are expected to co-create is based on the structure of the exchange. In the context of sharing, the exchange occurs directly between product owner and the person using the object. No extraneous other is needed to check a product after each usage and before it is returned to the owner or shared with the next person. The expectation is that each person will treat shared products well because the owner and other potential users are known and not caring for it could result in punishment through social channels. The recipient of the shared product knows that mistreatment of the product will negatively affect other people they know. The social
bonds between people who share are often sufficient to override the need for another entity in the exchange. Figure 1 depicts the sharing exchange.

Owner → Sharing Recipient → Owner → Sharing Recipient → Owner

Figure 1. Sharing Exchanges

With rentals, the exchange typically is not between product owner and renter or renter to renter. Rather, another intervening entity exists in the exchange as evidenced by Figure 2. The intervening entity may be an employee of the product owner or a third-party intermediary such as a cleaning service. Intervening entities are typically used because 1) it allows standardization of the object between users, 2) consumers often do not expect to engage in extra-role behaviors if payment to use an object is required and 3) consumers do not often think about how their actions impact the following user when subsequent users are unknown. There may also be an expectation that an intervening entity role should exist given that monetary payment is exchanged.

Owner → Renter → Other Entity → Owner → Renter → Other Entity

Figure 2. Renting Exchanges

**Self-Interest in Access-Based Consumption**

Lack of consideration of other users is particularly true in situations where there are no social bonds between users, as with sharing, to influence and regulate behavior.
Instead, consumers who are not socially bound to other users may act out of their own self-interest, maximizing personal gain, as evidenced by the tale of the tragedy of the commons (Hardin 1968). Acting out of self-interest can still occur when an intervening entity does not exist and users are reliant on each other to treat the rented product well. In the example of car rentals, examples of self-interest could include driving through mud puddles and not washing the car, hitting potholes in the street, leaving trash in the car or parking in tight spaces that could lead to the car getting small dings and scratches. Even though all of these cited behaviors negatively influence the experience of the next user, the actions may still be in the current users’ best interests as ways to save time or increase the fun factor. Bardhi and Eckhardt (2012) found evidence of this selfish behavior in their study of a short-term car rental company (Zipcar). A member of the car rental service provided this quote in one of their interviews, “You can just beat the hell out of it; it’s not your car… So if I destroy the suspension, so be it! Somebody will fix it. Not me.” (891).

Another benefit of using intervening entities is that specific behaviors are directly attributable to each user of an item and sanctions can be imposed for negative actions. When renters are interpersonally anonymous and no intervening entity is utilized, it is much more challenging to distinguish the causal mechanism and to properly reward or punish behaviors. Another aspect of consumer participation to consider is reciprocity.

**Consumer Participation and Reciprocity**

The norm of reciprocity is a universal norm underlying social systems. The norm dictates you have an obligation to help those who have helped you (Gouldner 1960). For
example, if an object is shared, reciprocation can include saying thank you, demonstrating care for the object and sharing something with the object’s owner in the future. Reciprocity is a natural part of consumer participation because it represents acknowledgment that others have done their part in an exchange and that there is an obligation to do the same, a sense of “paying it forward.”

Belk (2010) identifies reciprocity as a key difference between renting and sharing. Reciprocity is defined as “a matched or mutually equivalent exchange or paying back what one has received” (Laursen and Hartup 2002, 30). In the management literature, reciprocity is a component of organizational citizenship behavior which is used as a theoretical explanation of why employees go above contractually stated duties and help other employees (Deckop, Cirka, Andersson 2003; Organ 1988; Settoon, Bennett and Liden 1996) as well as to explain both positive and negative outcomes in manager-subordinate relationships (Cropanzano and Mitchell 2005; Uhl-Bien, Graen, Scandura 2000; Uhl-Bien and Maslyn 2003). Reciprocity occurs in both renting and sharing but in different manners.

**Reciprocity in Sharing**

One of the key attributes of sharing is that there is no time frame within which reciprocation must occur. With sharing, reciprocity is viewed as a continuous series of interdependent exchanges that build over time (Molm 1994). The expectation when one shares something is that the recipient will do something in return when the occasion rises in the future (Blau 1964). Reciprocity in social exchanges such as sharing is
“characterized by unspecified obligations over an unspecified time frame” (Deckop, Cirka, Andersson 2003, 103). In the interim, an expression of gratitude is sufficient acknowledgement of the exchange and indicative of future obligation. The assumption is that with people among whom sharing occurs, the relationship has a long-term orientation and each party recognizes that the role of giver and receiver will change over time with balance achieved in the long run. The roles of giver and receiver are learned from an early age. With children, reciprocity stems from mutual respect and cooperation that is learned over time (Piaget 1932). Reciprocity is deemed the “golden rule” and is continually taught to children: treat others as you wish to be treated. Children begin to recognize that sharing an item now may lead to benefits in the future when reciprocity occurs (Staub and Sherk 1970).

Another characteristic of reciprocity in regard to sharing is that the “repayment” does not have to be to the original sharer. Instead, it can be paid forward to others, known as indirect reciprocity (Molm 2010). Indirect reciprocity suggests that sharing can occur within a larger network of social ties that rely on generating overall benefits for a community or group rather than just individual benefits. This is in stark contrast to renting where benefits are primarily generated to the owner of the rented product.

*Reciprocity in Renting*

With renting, reciprocity is mandatory and immediate, occurring at the time of the transaction. Money is exchanged for use of a product for a set amount of time. The reciprocity is directed to the owner of the rented product which underlies the
independence of renting exchanges. There is no continuing obligation to each other’s welfare with renting (Laursen and Hartup 2002). Both parties can exit the exchange because all obligations have been met and there is no future dependence on the other exchange partner.

The inclusion of need for intervening entities and reciprocity in a discourse on consumer participation reflects how incorporation of the social element alters the dimension originally proposed by Bardhi and Eckhardt (2012). Changing the name from consumer involvement to consumer participation further aligns this dimension with the literature. Another dimension that is highly impacted through integration of the social element is the type of accessed object.

**Type of Accessed Object**

Bardhi and Eckhardt (2012) emphasize that the type of accessed object varies in terms of whether the accessed object is material or digital which references the tangibility of the product. Tangibility affects two factors: exclusivity of access and concerns with contagion. Bardhi and Eckhardt only focused on one factor, exclusivity of access. Exclusivity of access is related to whether the item is material or digital. For material objects, use by one person excludes use at the same time by another. This differs from digital items which can be accessed by many people simultaneously. For example, when a movie on DVD is rented from a kiosk, others cannot use that same DVD at the same time. If that same movie were rented online, multiple people could stream it at the same time.
time. However, tangibility does not only introduce exclusivity of access but its physical nature also introduces concerns with contagion.

**Tangibility and Concern with Contagion**

Tangible objects can be physically touched. If objects can be touched then concerns with physical contagion often arise, indicating an indirect social influence. Concerns are often heightened when multiple people use the same objects as is the case with access-based consumption. Reactions to contagion may differ according to whether or not the other users are known or unknown, with greater contagion concerns present when other users are unknown as is often the case with renting (Belk 2010). Concern with contagion is the belief that objects or people can transfer their properties merely through touching and that the properties remain even after contact vanishes (Rozin, Millman and Nemeroff 1986). Concern with physical contagion can manifest as disgust, an emotional state of revulsion and a desire to create distance from the object generating the disgust (Morales and Fitzsimons 2007). Therefore, although both rented and shared products are eligible for viewing as contaminated, the degree of concern is manifested differently due to existent social connections with other users. The type of object accessed, whether digital or material, is differentially influenced by social elements, further supporting the belief that the original Bardhi and Eckhardt dimension should be expanded to consider contagion concerns, providing a more accurate reflection of what actually occurs.
Political Consumerism

The final dimension proposed by Bardhi and Eckhardt (2012) is political consumerism. Political consumerism is the degree to which the type of consumption is chosen to represent ideological interests. It explains why consumers may be motivated to choose consumption modes other than ownership. For example, people may choose to rent a bike when needed rather than own a car as a political statement regarding environmentalism and sustainability. This dimension is already social in nature and therefore no deviation from their overall description is suggested.

However, one could expect differences between sharing and renting regarding political consumerism. With sharing, people may band together to make a political statement, demonstrating that a group of people are committed to forgoing ownership of certain products in favor of sharing. Benkler (2004) interprets sharing as a type of pro-social behavior. Many community sharing groups formed around this concept. For example, Sharehood in Australia was formed so that people within a neighborhood could use each other’s goods (i.e. washing machines, drills) rather than purchase redundant products (Belk 2013). On their website (now Streetbank), the founders indicate that sharing fosters connections and community involvement, as well as reducing consumption and poverty. Sharing at the local level allows for recognition of local needs and provides solutions. People engaging in sharing behaviors often comment that it makes economic and environmental sense to share (Shareable.com). Shareable’s mission is to promote a “movement emerging from the grassroots up to solve today’s biggest challenges, which old, top-down institutions are failing to address.” Based on these
examples it is apparent that sharing provides alternative solutions to local problems by creating a common voice for a community of people. Renting, alternatively, is often done to meet a need at the individual level. Overall, renting could have overtones of political consumerism as it is an alternative to the traditional consumption modality of ownership, but it is less likely so than with sharing.

Governance

Governance is the “multidimensional phenomenon which encompasses the initiation, termination and ongoing relationship maintenance between a set of parties” (Heide 1994, 72). Governance mechanisms are typically found in transactional exchanges to restrain opportunism, or the lack of honesty in transactions, including acting out of self-interest among channel partners (Williamson 1973, 317). Opportunism is more likely to occur when relationship commitment is low, there is uncertainty or when goals are not congruent (Heide and John 1992; Karunaratna and Johnson 1997). If the exchange is relational, shared norms and values tend to dictate the relationship rather than the threat of sanctions (Gundlach, Achrol and Mentzer 1995). There are many types of governance mechanisms available to employ. One type often used is contracts.

The Role of Contracts

Contracts are formal documents that express the legal rights of exchange parties (Gundlach and Murphy 1993, 38). Formal contracts are not frequently employed in the
sharing context. Instead, these exchanges are more likely to be based in relational elements such as trust, equity and responsibility (Gundlach and Murphy 1993). Gundlach and Murphy’s findings related to business-to-business exchange suggest that in order for relationship exchanges to be successful and carry forward to the future, each party should be able to: 1) accept the other’s word that they will honor an agreement, 2) expect fair treatment from the other, and 3) that each party will accept responsibility for their actions and if harm is done, they are ethically bound to try to repair it. Lusch and Brown (1996) frame this as normative contracts in which relational norms, mutual understanding and expectation govern acceptable behavior. Essentially, each party has faith that the other will ‘do right’ over time even if there is no formal contract stipulating that they must. Rather, each party chooses to act in this manner because they would like the relationship to continue over time. Dwyer, Schurr and Oh (1987) compared the process characteristics for discrete transactions (renting) and relational exchange (sharing), explaining how transactions are often devoid of personal relationships which is the opposite of relational exchanges in which they are the cornerstone. With the incorporation of the social element of relationships into exchanges, the additional dimension of governance is therefore proposed.

The inclusion of the social element alters, expands or eradicates the original dimensions proposed by Bardhi and Eckhardt. The revised dimensions of anonymity, temporality, consumer participation, type of accessed object, political consumerism and governance are more reflective of the socially situated processes involved when renting or sharing. These new dimensions are of particular importance given their influence on sense of community, contagion, cooperation and loneliness.
Sense of Community and Social Connectivity

Community is a key outcome variable strongly influenced by the social elements woven throughout the dimensions previously outlined. A sense of community is defined as “the feeling an individual has about belonging to a group and involves the strength of the attachment people feel for their group” (Halamova 2001, 137). Communities have a shared sense of purpose, which is something that brings them together (Jason and Kobayashi 1995). McMillan and Chavis (1986) identified four factors key to developing a sense of community: membership, influence, integration and fulfillment of needs. People’s needs are recognized, their voices are heard and they have a shared emotional connection with other people that belong to the same community. There are many reasons that people participate in communities: to reduce loneliness, to connect with other people, to feel a sense of belonging or to enhance a sense of self-worth (Baumeister 1998; Baumeister and Leary 1995; McKenna and Bargh 1999).

Sense of community is of significance because the bonds of community are quite powerful. These bonds can lead to actions which improve the environment, prevent crime, disease prevention, encourage participation in local groups or improve social conditions (Chavis and Wandersman 1990; Checkoway 1995; Green 1986; Perkins, Florin, Rich, Wandersman and Chavis 1990). Indeed, communities are often known for inciting action for the benefit of their members. Activities that build community tend to create boundaries that clearly identify who does and does not belong, promote shared
goals, encourage members to help other members and create a sense of trust and connectedness within the group (Breunig, O’Connell, Todd, Anderson and Young 2010; Lyons 2003). Actions can also detract from sense of community. For instance, when group members do not contribute equally, cause harm to others or act out of self-interest rather than the benefit of the group, this detracts from a sense of community. When this occurs, members can enact punishment through social channels, such as exclusion or creating distance between the offender and other members of the community. This fear of being dropped from a group is often strong enough to keep members in line. For example, many of our criminal laws rely on this fear to deter crime. If you do commit a crime, you may go to jail or have to sign-up for the sexual offender registry, indicating that you no longer belong to regular society but instead are a member of the community of offenders (Tewksbury and Lees 2007).

**Sense of Community in Access-Based Consumption**

With sharing, a sense of community is often inherent. First, one tends to know and associate with those whom one shares, indicating some sort of communal interest and bond. Based on this association, one is likely to engage in behaviors that enhance standing within the community. This often entails acting out of the group’s best interest and behaving according to the norms generated within this community. This behavior stems from knowledge of others and a desire to belong. Once time and energy are invested in developing relationships with these people and likely want to continue these bonds, so you behave appropriately.
With renting, there is often no inherent sense of community. This lacking stems from the fact that others involved in the product rental are not known so there is no sense of who is harmed by destructive behavior. The lack of community also stems from the fact that there is no sense of continuing obligation. Both parties in a rental situation agree to a set amount of money exchanged for a set amount of time and once those criteria are met, both parties can exit from the exchange. Good behavior is often elicited due to the threat of monetary punishment, not social punishment. This may or may not be sufficient, depending on how high the punitive charges are. People view themselves as solitary actors, not as a community of other users, and thus may behave in ways that are not supportive of others, further detracting from the sense of community. Given this, Shultz and Holbrook (1999) suggest that creating a sense of community is one way to tackle the tragedies of the commons. When a person perceives themselves as a member of a community, it can lead to more cooperation, greater adherence to group norms and the ability to truly punish defectors.

**Cooperation**

Cooperation is defined as “the act of working together to one end” (Mead 1976, 8). When cooperation is envisioned, it is typically in the context of a group. Although relationships of varying degrees of closeness may be present among members of the group, the other members are known and identifiable. Indeed, in order to even have a group, there must be a clear way to make a distinction between those that belong and those that do not (Campbell 1958). Dawes (1991) suggests that group identity is an
important factor in determining cooperation. If someone strongly identifies with a group, self-interest is frequently set aside for the sake or betterment of the group’s best interest. If group identification is not strong, putting other people’s welfare above one’s own is less likely to occur. In a study on the effects of group versus individual pledges and discussion with other members, Chen (1996) found that group identification was an antecedent for choosing to cooperate, although it alone did not lead to larger pledges.

Research on cooperation has also used the lens of collectivist versus individualistic societies. Individualism is characterized by concern for personal interests and the prioritizing of these interests above those of a group. In collectivism, one is most concerned with the group’s well-being and behaves accordingly, even if personal interests suffer (Wagner 1995). In the renting and sharing contexts, cooperation can be evidenced in treating the accessed product well and behaving in a way that demonstrates conscientiousness towards other users.

**Loneliness**

Another variable to consider in access-based consumption is loneliness. Although this may be surprising, it is also relevant. Emotional loneliness is defined as the unpleasant experience that occurs when a person’s network of social relations is deficient in some important way, either quantitatively or qualitatively (Perlman and Peplau 1981, 31). Emotional loneliness has a negative effect on overall well-being, characterized by increased anxiety, harsher evaluation of the self and less satisfaction with relationships (Ernst and Cacioppo 1999). The incidence of loneliness in the population appears to be
increasing due to a variety of factors. One factor is the movement of people from cities to suburbs, beginning in the 1950’s, due to improvements in infrastructure and the reduction in costs of car ownership (Frey and Speare 1988). Fewer people, an average of 2.6 per household, now live in bigger homes; the average size of a new home in 2007 was 2,521 square feet compared with 983 square feet in 1950 according to the National Association of Home Builders (2010). Happiness, as measured by a Gallup poll peaked in 1950 and has remained flat since then. Apparently the desire stoked by marketers that having and buying will increase happiness has not come to fruition. Instead, people have many possessions, many of which are rarely used, that require them to work many hours to care for and afford. Working more hours leaves less time for the social and community connections that actually do improve well-being and happiness. Renting and sharing items typically requires a lower financial commitment which will free up time for people to engage in more fulfilling activities and engage with other people.

Human beings are highly driven by a need to belong and a need to interact with others (Erikson 1963), which is why loneliness can cause many maladaptive behaviors. For many hundreds of years our ancestral groups fulfilled this need for social interaction by living in communities that required coordination and reliance on each other to meet the basic daily needs of food, shelter and safety. The advances of technology have allowed for members of society to become more independent, where everyone is in charge of providing (often through monetary exchange) their own basic necessities. While benefits do arise from these technological advances, one negative consequence is that people no longer establish, interact or maintain as many social relationships (Heinrich and Gullone 2006). Technology allows people to remain anonymous and
disconnected from others and still meet material needs. However, technology can also reduce loneliness if used to make connections with others. Many of the renting and sharing platforms are driven by technology that promotes community and connection with others.

**Reductions in Loneliness**

Simply being around other people does not reduce loneliness, as loneliness and isolation are not the same experience. Jones (1982) showed that the total amount of social contact is similar for both lonely and non-lonely people, yet the quality of the interactions differed. No one in society is exempt from loneliness, as it influences people of all ages, genders, races, socioeconomic status, marital status and health status (Neto and Barros 2000). Lonely people are more likely to experience poor self-esteem, view themselves in a negative manner and lack social skills (Cacioppo, Ernst, Burleson, McClintock, Malarkey, Hawkley 2000).

How people cope differs by the type of loneliness experienced by the person. There are four categories of loneliness: physical aloneness, emotional loneliness, isolation and solitude (Gotesky 1965). All but solitude have negative connotations. Access-based consumption may aid in reducing emotional loneliness, or loneliness derived from feeling socially distant and not connected to other people. Russell, Cutron, Rose and Yurko (1984) found that those experiencing emotional loneliness tended to adopt active coping strategies, such as forming new relationships with others. This is a reasonable strategy because these people recognize that they have some control in the
situation and solutions are available. A study found some success with reducing perceived emotional loneliness among college students by emphasizing that social support can be found in many different types of relationships and are not limited by family or romantic connections (Ponzetti, 1990). With sharing, social support and connections with others is already present. Indeed connections are inherent to sharing which is grounded in social relationships. Renting is not naturally embedded with that same degree of social connectedness. However, by promoting a sense of community in the rental domain among users, emotional loneliness could potentially be reduced.

Another outcome variable strongly influenced by the social element is contagion.

**Contagion**

*Negative Effects of Contagion*

Contagion can have either a positive or negative influence. Contagion is a belief that touch transmits properties of a person, either desirable or undesirable, even if there is no physical evidence of a transfer. In a study by Rozin, Markwith and McCauley (1994), the authors found that participants are more likely to have negative views towards objects worn (sweater), touched (hotel bed) or used (car) by a man suffering from an aversive condition (Tuberculosis, murderer, AIDS, lost limb in accident) rather than a healthy man even though the object was described as cleaned or laundered in each condition. In all cases, a new object was preferable. A healthy man was next preferable as the prior user. For the sweater, drop in liking from the new to the healthy man was 33% of the drop in
liking from the new sweater to the homosexual man with AIDS sweater. This suggests that aversive conditions can somehow rub off on the object, tainting it, and remain even after cleaning.

Nemeroff and Rozin (1994) also had similar findings after asking participants how they would feel wearing a sweater that had been worn briefly and not laundered by either a positive (i.e. lover, good person) or negative (i.e. enemy, diseased person or evil person). A sweater that was in contact with a negative source received strongly negative responses and a sweater in contact with a positive source received slightly positive responses. O’Reilly, Rucker, Hughes, Gorang and Hand (1984) found that participants would not purchase certain items of used clothing, such as overcoats and underwear, because they were viewed as contaminated due to their prior ownership and usage by others. They did not mention the prior owner; simply knowing that someone else had owned the product was enough to result in devaluation of the item. Argo, Dahl and Morales (2006) had similar findings. Product evaluations and purchase intentions of a product were lower when they inferred others had touched the focal product. In another study, Di Muro and Noseworthy (2013) showed that people actively sought and retained crisp currency and actively ridded themselves of worn currency due to contamination, and this was consistent across various denominations. This suggests a robust influence of negative contagion effects in that people tend not to want items that are perceived as having been touched or used by others.
**Positive Effects of Contagion**

Alternatively, positive contagion can also occur. In a study again using a shirt as the focal product, Argo, Dahl and Morales (2008) found that participants had higher evaluations of the shirt, greater purchase intentions and were willing to pay more for it when it was previously worn by a highly attractive person of the opposite sex. Newman, Diesendruck and Bloom (2011) found that participants had a greater desire to purchase objects owned by positive celebrities and that effect was enhanced when the celebrity had greater physical contact with the object. Clearly, the idea of contagion can also have a positive influence in certain situations.

**Contagion Concerns in Access-Based Consumption**

When multiple people use the same product, contagion concerns are typically present. Building on Nemeroff and Rozin (1994), differences in perception of “used products” appear to be based on knowledge regarding the prior user. Products used by people known to us and cared about, which is often the case in sharing, are less offensive. When renting, knowledge regarding the prior user is limited, heightening concern with contagion. When information about others is limited, stereotypes are often used (Lewis, Hodges, Laurent, Srivastava and Biancarosa 2012). One pervasive stereotype of people who rent homes is that they are feckless consumers who misallocate their resources and are failures in the aesthetic, ethics and community domains of social life (Cheshire, Walters and Rosenblatt 2010; Rowlands and Gurney 2000). The perceptions are almost
inflammatory in their negative nature. This suggests that when renting products where other renters of the product are not known, negative stereotypes of other renters may prevail and will thus lead to the rental product being viewed as tainted and contaminated by the prior renter. These unappealing stereotypes are not prevalent in sharing contexts because the owner of the shared product is known and judgments are less reliant on stereotypes. The difference in reliance on stereotypes provides further support for the idea that renting and sharing differ in regard to expectations of contagion. The impact of contagion is clearly important to consider in research on access-based consumption.

Clearly, many possible outcomes are influenced when the social element is taken into account in access-based consumption. Separating renting and sharing in future research is important for understanding the unique contribution offered by each mode of consumption.

GENERAL DISCUSSION

In this essay the original dimensions of access-based consumption proposed by Bardhi and Eckhardt were re-conceptualized. Market mediation was dropped in favor of separating renting and sharing into different categories. Access is categorized as a rental when money is exchanged for access to the object and when money is not exchanged the access is categorized as sharing. Separation of these two aspects of access-based consumption allows for examination of how the remaining dimensions are affected. Although the presence or absence of money is used as a categorization variable, it is the social aspects associated with each type of exchange that offer further delineation.
Sharing exchanges are governed by social relationships. With sharing, the access of usage is often not explicitly specified and formal governance structures are typically not employed. The usage anonymity could be either public or private but the interpersonal anonymity is extremely low as sharing typically occurs among people who know each other. Consumer participation is high given the need for consumers to engage in extra-role behaviors. Cooperation and reciprocity are also high in the sharing context; people are willing to forgo self-interested behavior in order to maintain standing within a group of people. The type of accessed object shared could be either digital or material but the evidence of others with shared tangible objects is perceived differently than with rentals of tangible objects. Evidence of the owner on the object may serve to remind the user of the person and their relationship rather than elicit disgust. In addition, people may be more likely to use sharing as a political statement, as it allows for the banding together of others with similar sentiments who likely know each other.

Renting is different from sharing and many of the differences result from the absence of social bonds in the exchange. The exchange is governed by formal contracts that explicitly state the terms of use and penalties for failure to adhere to the specified terms. Interpersonal anonymity is often high, increasing the potential likelihood of bad behavior towards both the accessed object and the other users. Bad behavior towards other users might be illustrated by low cooperation and reciprocity. To prevent this bad behavior, intermediaries are often necessary to allow for identification of the effects created by each individual user. Consumer participation is typically low because companies cannot expect users to rely on each other and act out of group interest instead of self-interest. Given that penalties are inflected monetarily rather than socially, the
penalties may not always deter self-interested behavior. Finally, evidence of other users in the rental context is likely to elicit feelings of disgust as these other users are not known and may be stereotyped as excessively dirty or unclean. Political consumerism may occur, but given that users are typically interpersonally anonymous, it is challenging to gain noticeable traction on an issue. Through the separation of renting and sharing and the alteration of other dimensions to account for the social element, research findings should offer more realistic managerial and theoretical implications.

The social element is vital to account for in any research regarding access-based consumption, as it is clearly both directly and indirectly influential. When perusing the websites of most companies operating in the renting and sharing domains, there is constant and consistent mention that users “belong to a community.” At first, the desire for community could be mistaken as the end goal, that these companies view access-based consumption as a way to encourage people to meet others around them, make friends and help to eradicate the loneliness that has become part of our society as people surround themselves with stuff and spend leisure time on individualistic pursuits such as surfing the internet or watching TV. However, after careful consideration, it is apparent that companies also benefit from reminding users that they are part of a community and that community is a part of the process not the end of it. Community development and resulting social bonds are one way to enforce norms and regulate behavior without the need for formal governance structures. It is a way to make users think beyond themselves. This is especially important if the accessed product is reliant on consumer participation without intermediaries because one user directly influences the experience of the next user.
Contagion is also directly impacted by the social element. Evidence that others have used the same product may be interpreted differently based on knowledge of the other users. When the other users are known, contagion concerns may be suppressed because it is known from whom any “taint” originated. Contagion concerns will be heightened if nothing is known about other users and impressions of others are generated from stereotypes. Consumer participation is also related to contagion. If consumer participation is high, there is likely not standardization of the product between users as each person may have different principles as to what suffices as clean. When consumer participation is low due to the usage of intermediaries, contagion concerns should be reduced given that the product is cleaned between users.

In the next essay, the focus is the rental context. Empirical research will investigate the effects of certain dimensions outlined in this essay. The context will be short-term usage, with access time clearly stipulated and company rules (governance) explicitly stated. Usage of the product will be in public so there is low usage anonymity. Interpersonal anonymity is high given that the other users are unknown to each other. Consumer participation is also high because the company expects consumers to engage in extra-role behaviors. The type of rental product is tangible so concerns with contagion should exist. Throughout the studies, encounter with the prior user at the time of product usage is manipulated. In addition, availability of information about the prior user is manipulated. The primary dependent variables of interest are sense of community and concerns with contagion, manifested through disgust. The effects of communication between users are explored, particularly in reference to care for the rental product. The
inspiration is to achieve many of the same positive outcomes achieved with sharing in a rental context where existing social bonds are few and interpersonal anonymity exists.
CHAPTER II
THE ROLE OF DISGUST AND COMMUNITIES IN THE RENTAL CONTEXT

INTRODUCTION

Imagine, from a woman’s perspective, that you received an invitation to a fancy black tie event in your city. Instead of purchasing a dress to wear, you decide to rent your ball gown. As you peruse gowns available for rental on a company’s website, what images would you prefer for presentation of the gowns? Stand-alone images of the gown, a model wearing a gown or an uploaded image of a prior renter wearing the actual gown? Answers may vary by individual, but how a company decides to present images of the available gowns is indicative of something different regarding the rental experience. Displaying an image of a prior renter in the gown may communicate to future renters that a community, united by shared interest in fashion, exists among women who choose to rent from this particular company. However, viewing a prior renter in the actual gown you may rent could also raise concerns about contagion.

The current research is motivated by a desire to understand what situational factors, both within the realm of company control and outside it, influence the rental experience. Through this understanding, companies can uncover ways to make renting a more desirable consumption strategy for more people. Worldwide consumption cannot continue at its current pace as the planet does not have sufficient resources to support heightened demand by all its residents. An alternative way to meet greater demand by individuals is to encourage renting. Instead of every person needing to own and maintain
a product, people can rent from those around them instead of purchasing the needed product. Renting allows for usage of idle resources, or resources that would go unused for periods of time. If rentals of all product categories are to become a viable consumption strategy for more people, research needs to demonstrate what actually influences a rental experience. It is not sufficient for researchers or practitioners to only understand what impacts the decision to rent versus purchase a product.

This essay investigates how concerns with contagion influence the rental experience and how those effects may be attenuated when there is a sense of community among renters. The rental experience is simply where (1) money is exchanged for usage of an object, (2) for a defined period of time, and (3) where transfer of ownership does not occur. Prior research on renting has focused on determining factors that influence decisions to rent or purchase. Using the guiding idea that social elements strongly influence rental experiences, the current research extends prior work by evaluating what influences attitudes and behaviors in the rental context as well as subsequent evaluations of rental services. Outcomes, such as satisfaction with the envisioned experience, attitude toward the rental service, concern with contagion, sense of community and intended care of a rental product are explored. The effects of providing information about other users of the rental service are also considered.

LITERATURE REVIEW

Accounting for the social element is crucial in understanding what influences attitudes and behaviors in the rental context. The prior essay demonstrated how
incorporating the social element affects each dimension, from anonymity to political consumerism. In this essay, specific outcome variables are examined to show how effects may vary according to social factors. The guiding theory of social distance is used to examine the relationship between an individual and others in the rental context.

Theory of Social Distance

Social distance is described as the gap or distance between social groups (Furnham and Bochner 1982). Social distance can result from cultural distance, not knowing the other people [anonymity] or differences in social class, race or religion (Laumann 1965; Triandis and Triandis 1962). Social distance can also result from the impersonal nature of certain situations, such as shopping on the Internet which can often be a solitary activity. Compared to a store situation where one often interacts with other consumers or a salesperson, making purchases online is typically absent social interaction (Holzwarth, Janeszewski and Neumann 2006). In a study on the prediction of social interaction, Laumann and Senter (1976) found that people prefer to interact with people of their own social class, as defined by socioeconomics, and prefer to avoid social classes beneath them. People tend to interact with and choose friends who are similar to one’s self on characteristics such as social class or biological characteristics (Blau 1974; Granovetter 1983). Prior research would therefore suggest that people prefer rental services where social distance is not present, implying that rental services are more desirable when people are similar on biological or sociological characteristics because a marked preference for interactions with similar others has been previously found.
However, given that people of various backgrounds all use the same products in rentals, the desire to interact only with people similar to one’s self on superficial characteristics is necessary to consider and would be challenging to achieve. Companies must therefore find ways to either overcome this desire to only interact with similar others or find mechanisms that convey similarity among users who may differ on biological or sociological characteristics.

**Social Distance and Stereotypes**

In some instances, people do prefer to maintain social distance between themselves and others. People may particularly prefer to associate with similar others in the presence of a negative attribute, such as mental illness, creating a clear in-group and out-group delineation. In a study on perceptions of people suffering from mental illness, a significant portion of respondents indicated their desire to maintain a distance from those suffering from schizophrenia, major depression, cocaine or alcohol distance mainly due to perceptions of likelihood of potential violence (Link, Phelan, Bresnahan, Stueve and Pescosolido 1999). In the Link et al. study, participants indicated “unrealistically elevated fears” of violence by members of each mental illness categorization, suggesting that fear and stereotypes not factual knowledge of actual behaviors drive characterization of those suffering from mental illness. Stereotypes are “efficient knowledge structures that represent a social group” (Corrigan, Edwards, Green, Diwan and Penn 2001). Stereotypes serve as a heuristic allowing people to generate impressions of those who belong to a certain group (Hamilton and Sherman 1996). The study demonstrates the
reliance on stereotypes when socially distant from others. These findings are troublesome in light of the negative stereotypes which exist regarding people who rent. Research has found a rather pervasive stereotype indicating that people who rent are feckless consumers who misallocate their resources and are failures in the aesthetic, ethics and community domains of social life (Cheshire, Walters and Rosenblatt 2010; Rowlands and Gurney 2000).

**Benefits of Reducing Social Distance**

Of positive note, Corrigan et al. (2001) expounded on their findings regarding mental illness and stereotypes, showing that familiarity with people suffering from mental illness helped to suppress prejudicial attitudes towards these groups. Their results suggest that knowledge of others decreases reliance on stereotypes, reducing social distance and increasing perceptions of variability within a group. As social distance decreases, the other members with whom one interacts become identifiable rather than remaining anonymous (Bohnet and Frey 1999). Reducing reliance on stereotypes and reducing social distance clearly can occur by way of learning information about others.

There are other benefits beyond decreased reliance on stereotypes associated with reduction in social distance. Reduced social distance can lead to more modest self-presentation. When distance from others exists, people are more likely to engage in presentations that promote the self in the most favorable light regardless if the presentation is most accurate. When engaging with people who are not socially distant from one’s self, presentations are more modest and less conceited (Tice, Butler, Muraven
and Stillwell 1995). People are also more likely to cooperate with others and to think about benefits of the group rather than only act out of self-interest when closer to others (Hoffman, McCabe and Smith 1996). When socially distant, acting out of self-interest is more probable. In addition, Abbott, Hall and Linville (1993) found that as social distance decreased, juries were better able to sympathize with the defendant, which positively influenced their judgments in the case. An optimistic bias towards those known and identifiable is particularly robust in individualist cultures, such as the United States (Buchan, Johnson and Croson 2006). The instinctual tendency appears to be rewarding those close to us and punishing those socially distant from us. With renting, multiple people who may be unknown to each other use the same rental products. If the inclination is to punish those who are socially distant, as many of the relationships between renters may be, punishment could be in the form of lack of care of the communal items, or ignoring and avoiding other users. If rented products are not properly cared for, everyone’s experience is negatively impacted and consumers may opt out of renting and instead pursue other modes of consumption. As a business model, users punishing other users by engaging in negative acts towards the products are a costly proposition and one that companies should try to avoid. One way is for the companies to inflict punishment for bad behavior rather than allowing users to do so. Another alternative that may prove more beneficial to all parties is to try to reduce social distance between users.
Methods of Reducing Social Distance

The primary way to reduce social distance between people is to make the other person known. Multiple possibilities exist to make others known in the rental context, particularly in the case of tangible products, or products that can be touched and are not digital. When renting intangible items, the context is often strictly online as most intangible items are digital. For intangible items, it is possible to make other renters known through online mechanisms. With rentals of tangible products, a mixed mode context exists comprising both online and offline components (Walther and Parks 2002). Online is where information about the service is gathered and use of the product may be arranged and offline is where usage occurs. The nature of mixed modalities in rentals of tangible products allows for making others known through both online and offline mechanisms.

In face-to-face interactions with others, biological characteristics are visible and serve as sources of information about others. People make judgments about unknown others based on available information (Huber and McCann 1982). One type of usable information is appearance (Aronoff, Woitke and Hyman 1992). Another type of information is behavior, including whether behavior is appropriate and adheres to social norms (Garling 1998). Offline, these cues are only useful to the extent they are observable. In an online environment, being unknown and physically unobservable gives people the opportunity to try on different personas, both social and physical, that differ from their real-life identities (Turkle 2011). Online people can become someone they could never be offline. Both online and offline information are important to consider in
the rental context given that it is often mixed mode and users typically do not know each other. It is likely that consumers will use all available information to learn about others who use the same rented products. If the information is only available online, there is a chance that it may not accurately portray a person. If information is available online and can be confirmed offline, people may be more likely to provide accurate information online. This type of relationship with both online and offline components is known as an anchored relationship.

**Anchored Relationships and Social Distance**

Zhao, Grasmuck and Martin (2008) developed the idea of anchored relationships based on relationships that have mixed-modality with both online and offline components. Anchored relationships may influence the type of information presented online. As previously cited, online information is more modest and realistic when presented to those with whom an offline relationship also exists. It is considerably harder to pretend to be someone you are not when others know you in both online and offline contexts or at a minimum have physically viewed you in person. Research conducted in online dating shows that people seeking long-term relationships or expecting to meet a person face-to-face are more likely to disclose truthful information (Gibbs, Ellison and Heino 2006; Walther 1996). Friendships formed online are similarly influenced. Self-presentation and self-disclosure differ when anonymous online (vs. offline) encounters occur (Valkenburg and Peter 2011). Self-presentation is more modest offline and self-disclosure is more limited when compared to online encounters. These findings suggest
that the information shared with others online is influenced by whether or not there is an expectation of interaction with others offline as well. Anchored relationships are used as a foundation for empirical research in this essay. It is useful to consider in this research given that the context is mixed mode allowing for social distance to be reduced through either online or offline mechanisms.

Studies 1a and 1b demonstrate that encounters with other users are influential in evaluations of a rental service using two different contexts. In studies 2 and 3, online information about the prior user is provided to understand its influence on attitudes and behavioral responses towards the rental service. Before detailed discussion of each study is provided, relevant predictors and dependent measures are reviewed.

**Impacts of Other Consumers**

With rentals, other consumers can make information about themselves known either offline or online. In Studies 1a and 1b, the offline component is explored through an encounter with the prior renter at the time of product usage. Encounters with other users can influence perceptions of social distance because consumers may learn information about other users based on their observable biological characteristics or behavior.
Other Consumers

Social distance is prevalent in many consumption experiences, such as going out to eat or shopping at the mall, where nothing is known about the surrounding people beyond what is visually observable. The presence of others in a consumption experience can be categorized as a situational influence (Belk 1975). Much of the prior research on person to person impact uses the retail context and focuses on the relationship between consumer-salesperson on the outcomes of cognition, satisfaction and trust (Ahearne, Jelinek and Jones 2007; Babin, Boles and Darden 1995; Campbell and Kirmani 2000). However, it is not just the consumer-salesperson relationship that needs to be considered in the rental context. The consumer-consumer relationship should also be taken into account, particularly in rental situations without intermediaries.

Consumers may influence the experience of other consumers through either direct or indirect encounters (Baker 1987; Martin 1996). Tombs and McColl-Kennedy (2003) incorporate other consumers into their conceptual model of the social-servicescape. Their model builds on the physical environment servicescape model proposed by Bitner (1992) through the inclusion of a social element. Similar to the original dimensions for access-based consumption proposed by Bardhi and Eckhardt (2012), accounting for the social element in the rental context deepens understanding of factors that influence the consumer experience. Tombs and McColl-Kennedy (2003) suggest that the social elements of context, social density and others’ emotions influence consumers’ affective and cognitive responses. Similarly, Zajonc (1965) suggests that the presence of others leads to monitoring of social behaviors because cues are taken from others.
These customer-to-customer interactions between unacquainted people can both positively and negatively affect consumers’ experiences. In a study using the context of a cruise, Huang and Hsu (2010) found that when the quality of an interaction with another consumer was positive, it positively influenced the experience and ratings of satisfaction. Similarly, Arnould and Price (1993) showed that customer-to-customer interaction positively influenced satisfaction and contributed to feelings of communion with others during a river rafting experience. Söderlund (2011) explored how the number of customers, their actions and interactions with other customers influences retailer evaluation and customer satisfaction. He found that when consumers, who are strangers, behaved in a manner congruent with social norms, the focal consumer rated the retailer more highly. If the stranger was observed violating social norms, such as not wearing a shirt, the retailer was rated more negatively. Even though consumers act independently of the retailer, retailer evaluation is still impacted by the behavior of its consumers. In a paper on undesirable customers, one respondent indicated that an incident where others’ uncontrolled kids were running around at a restaurant negatively impacted her experience and influenced her decision never to return to that restaurant (Harris and Reynolds 2004). In an examination of Critical Incident Responses at tourist attractions in central Florida, Grove and Fisk (1997) found that more dissatisfying incidents arose when interacting with “foreigners” or people that followed different cultural protocols, suggesting that encounters with those who are socially distant may further negatively influence evaluations of an experience. Customers do not even need to directly interact with others to have an influence since their moods and emotions can be subconsciously transmitted (Tombs and McColl-Kennedy 2013). Collectively, these studies provide evidence that
behavior of other consumers should be considered in research of consumption experiences.

**Roles of Other Consumers in Renting**

Customer-to-customer interactions can also lead customers to take on the role of "partial employees." Examples of partial employee behavior include engaging in conversation with other consumers or offering opinions, advice and guidance on products (Baron, Harris and Davies 1996; Davies, Baron and Harris 1999; Harris, Baron and Ratcliffe 1994; Lovelock and Young 1979). In a field experiment conducted in a ladies’ clothing retailer, Harris, Davies and Baron (1997) found that conversations between customers were viewed as more credible than conversations between a customer and a sales assistant and led to greater satisfaction with the experience. Keh and Teo (2001) categorize cases where consumers voluntarily supply labor and knowledge in the service creation process as extra-role behaviors. The degree to which customers chose to engage in extra role behaviors clearly influences evaluations of a rental experience, even though these behaviors are often outside of a company’s control.

In renting, other consumers can play many roles and influence many aspects of the rental experience, both negatively and positively. Whether consciously or unconsciously, consumers utilize information available about other consumers in determining their satisfaction and attitude towards a rental company. Observation of others serves as a source of information. Even though learning information about other users may aid in reducing social distance, observing another user can also have a negative
consequence. Observation in the rental context makes salient the notion that a number of other people use the same rental product which may lead to potential concerns with contagion.

**Outcomes Associated with Other Consumers**

**Contagion**

Contagion refers to the belief that brief contact causes a transfer of properties from one object to another that outlasts the period of contact, even if no material evidence of the contact is evident (Rozin and Nemeroff 1990). Newman, Diesendruck and Bloom (2011) used the idea that qualities of a person can rub off on objects to explain why a celebrity’s physical contact with objects increased a fan’s desire to purchase the object. Argo, Dahl and Morales (2008) establish that positive contagion can occur. When a highly attractive person of the opposite gender tried on a shirt prior to the participant, the shirt was evaluated more positively. Argo, Dahl and Morales (2006) have also demonstrated that product evaluations and purchase likelihood can also be negatively impacted when consumers believe that a product has had contact with others.

Other consumers are often present in the retail environment. Prior research has shown that if a consumer observes the person touching or using a product it leads to negative evaluations (Argo, Dahl and Morales 2006; Morales and Fitzsimmons 2007). With purchase, one can take the product home and engage in rituals such as cleaning that will eradicate the presence of others and make it feel more like “mine.” This is not true
with rentals because lack of ownership precludes engagement in such rituals. In a qualitative study on short-term car rentals, Bardhi and Eckhardt (2012) found that participants did not identify with the rented Zipcars and did not engage in rituals associated with ownership such as perfecting the position of the seat for comfort or setting the radio to a favorite station. Furthermore, there was a certain degree of acceptance among users of Zipcar that the car would not meet their standards of cleanliness if they owned the car instead of rented it. Although not preferred or accepted, certain leeway in cleanliness and care existed because the cars are communally used not individually owned. Users of Zipcar understood that other users may break the rules by smoking in the cars or not returning the cars on time and inconveniencing the next user. Failure to observe common rules that negatively impact other users’ experiences serves as a reminder that multiple people use the same rental products. Making other users salient may serve to heighten concerns with contagion. Concerns may be more pronounced if other users are unknown. This is a contrast to sharing where contagion concerns are negligible given that known and often loved others often use the same product (Belk and Llamas 2011). Contagion is clearly an important variable to consider for research on tangible rented products, especially when no intermediary is present.

**Disgust**

Research has shown that knowing a product has been used by another leads to lower purchase intentions due to fears of contagion (Argo, Dahl and Morales 2006). Concern with contagion has been positively correlated with disgust and disgust has often
been used as a proxy measure for concern with contagion (deJong, Peters and Vanderhallen 2002; Olatunji, Sawchuk, Lohr and de Jong 2004; Sawchuk, Lohr, Tolin, Lee and Kleinknecht 2000). Disgust is “a revulsion at the prospect of (oral) incorporation of an offensive substance” (Rozin and Fallon 1987, 23). Feelings of disgust result from physical contact, leading to an immediate desire to distance one’s self from the object of disgust (Morales and Fitzsimmons 2007; Morales, Wu and Fitzsimons 2012). All rental products are used by multiple people. Even though consumers are aware that others have used the same product, disgust emotions may only become salient when evidence or observation of someone else using the product occurs. Observing others using a product that one intends to also rent may not only increase feelings of disgust, it could also indirectly have a negative impact on satisfaction and attitude towards the rental service.

**Satisfaction**

Satisfaction is a feeling resulting from evaluation of a usage experience (Cadotte, Woodruff and Jenkins 1987). Satisfaction can be viewed as the matching or lack of match between expectations and performance (Anderson and Sullivan 1993; Oliver 1980). Customer satisfaction is the consumers’ evaluation based on their experience and can be cumulative or specific to a transaction (Bontis, Booker and Serenko 2007; Wang, Lo and Yang 2004). It may also be classified as an intervening variable linking purchase and post-purchase behaviors such as repeat purchase, brand loyalty or positive word-of-mouth (Churchill Jr. and Surprenant 1982). With most short-term rentals, brand switching
behaviors are easy to execute which underscores the importance of measuring satisfaction with a rental service.

The presence of other customers who are strangers can positively or negatively affect customer satisfaction with an experience (Grove and Fisk 1997). In a rental context, customers use the same product that many other consumers use and the majority of other consumers are unknown. Even though observation of another user can provide information about that user and potentially reduce social distance, it is still likely that an encounter will negatively affect satisfaction. The other user is still fairly unknown to the current user given that the one-time nature of the encounter. If multiple encounters occurred over time, the negative reaction may be suppressed. In addition, actual observation of the prior user using the rental product could make salient that many people are using the same rental product. Perceptions of physical contact between another user and a product lead to increased feelings of disgust which in turn negatively influences evaluations (Argo, Dahl and Morales 2006). Thus, feelings of disgust will likely partially mediate the relationship between encountering another user and evaluations of a rental service.

**Attitude**

Attitude refers to an individuals’ internal evaluation of an object and is a useful predictor of subsequent consumer actions (Mitchell and Olson 1981). It is an affective response to a stimulus (Silk and Vavra 1974). Attitude is important because it provides a holistic assessment of an affective reaction to a situation. It is a measure frequently used
in advertising research because it indicates the feelings and moods induced by the advertisement. These feelings are complementary to cognitive evaluations of the product (Batra and Ray 1986). Research also shows that attitude is a significant predictor of behavior (Ajzen and Fishbein 1977). Participants will likely indicate a more negative attitude when viewing the prior user because it reminds them that multiple unknown others use the same product, triggering feelings of disgust. Given that attitude and satisfaction are both measures of affective responses, the two variables are often highly correlated. Both variables are measured in the current research because they are indicative of two different evaluations. Satisfaction assesses the match between expectation and reality and attitude assesses holistic emotional response in regard to a stimulus. Therefore, the following hypotheses are tested:

**H1:** Participants will experience (a) less satisfaction and (b) have a less favorable attitude in evaluations of a rental context when they encounter the prior user.

**H2:** Feelings of disgust will be greater in contexts where participants encounter another consumer.

**H3:** Feelings of disgust will partially mediate the relationship between encounter and (a) satisfaction and (b) attitude, where those who encounter the prior user will experience greater disgust and this will lead to reduced satisfaction and attitude.
STUDY 1A: INFLUENCE OF ENCOUNTERING ANOTHER USER ON AFFECTIVE RESPONSES TOWARDS A CAR RENTAL SERVICE

The context for the empirical research is car rentals. According to Auto Rental News (2013), car rental in the United States is an estimated $23B industry annually. A specific type of car rental is considered here, one that allows for rentals by the hour and is therefore ideal for short, local trips. The best known brand of this type of car rental is Zipcar, which began in 2000 and has experienced 100%+ annual growth (www.zipcar.com). Zipcars have permanent parking spaces conveniently located near residences, university campuses or places of employment. The company consistently monitors user needs to manage inventory in each location.

Method

Overview

The purpose of this study is to understand whether consumers perceive a rental experience differently in the presence of other consumers. Consumers will likely indicate (a) less satisfaction and (b) a less favorable attitude when they encounter the prior user (H1). In addition, consumers will experience more disgust when another user is encountered (H2). It is also predicted that disgust will partially mediate the relationship between imagined encounter and satisfaction and attitude (H3a and H3b). Study 1 is a one-way between-subject experimental design with encounter with the prior user (yes,
no) manipulated. Participants were recruited from Mturk in exchange for $0.15 and were randomly assigned to each condition. Ninety-eight participants ($M_{age} = 34.13$ (13.23), 41.3% female) successfully completed the study with forty-seven participants in the no-encounter condition and fifty-one in the encounter condition. Ages of participants ranged from 19 to 78-years-old. Participants were asked to imagine themselves in the proposed situation which called for a free two hour trial of a car rental service.

Imagination is often used in marketing studies because it would be too complex to replicate the real world situation in a lab experiment. In addition, using imagination removes confounds resulting from sensory factors such as taste, smell or hearing (Morewedge, Huh and Vosgerau 2010). Krishna (2012) found that the presence of sensory triggers from the use of actual product can result in consumers generating brand attribute information that is not provided by the researcher, which can strongly influence perceptions. Free trials often allow a consumer who may not be otherwise inclined to usage to experiment with a product before committing (Scott 1976). Asking participants to imagine a free trial offer in a lab experiment allows for the removal of money from the decision making equation. It allows participants to make decisions based only on the information provided in the scenario. Many consumers are unfamiliar with the new rental companies emerging as part of the collaborative consumption movement and free trials allow consumers to test something new without monetary risk. In the current research, participants are screened to ensure that none of them have used a short-term car rental similar to the one described in the materials. This ensures they do not have prior experience and that their responses are not influenced by their past experiences, either positive or negative. In addition, unfamiliarity with the rental service and process allows
for manipulation and measurement of variables that may not traditionally be accounted for in actual product rentals.

**Procedure**

Respondents completed the study remotely on their own computers. After signaling consent to participate in the study, participants were asked to imagine that they had received a free two hour trial offer for a new car rental service. All participants then received a description of the car rental service explaining how the service worked. Next, a box appeared on screen demonstrating how the online reservation process worked. Finally, participants envisioned that they went to the specified parking space to pick up the car they reserved. This is where the manipulation occurred. Half of the participants were instructed that they saw the car they rented and the other half of participants were instructed that as they approached the rental car they selected to use, they observed someone getting out of that car. Participants then completed a questionnaire assessing their impressions of the rental car service. They were thanked for their participation upon completion.

**Dependent Variables**

The dependent variables of interest were satisfaction with the imagined car rental experience, attitude toward the car rental service, and disgust emotions. Following Argo, Dahl and Morales (2006), fourteen emotions are included for evaluation to de-emphasize
the role of disgust to participants. Satisfaction was measured using a seven point Likert scale (highly dissatisfied/highly satisfied). Attitude toward the service was measured using a three item “bad/good,” “negative/positive,” “unfavorable/favorable,” seven point scale. The three items were averaged to create an attitude index (α=.980). Using a seven point scale anchored with very unlikely/very likely, participants indicated their likelihood of experiencing each randomly presented emotion, (disgusted, revolted, unclean, gross, frustrated, bad, annoyed, angry, mad, happy, hopeful, amused, cheerful, warmhearted) when using the car rental service described. A disgust index (α=.915) was created from the four emotions of interest (disgusted, revolted, unclean, gross). An attention check measure was also included instructing participants to select disagree from a list of five possible answers (strongly disagree/strongly agree). Finally, participants provided demographic information on age, sex, education and native language so that the variance associated with individual differences might be controlled.

Results

Six participants were removed from analyses due to missing the attention check. Data from 92 participants were retained. Although demographics are measured and reported in each study, the responses to these measures did not lead to significant differences in any of the studies and are reported but not included in subsequent analyses.

An analysis of variance (ANOVA) was used to test Hypotheses 1-2. As expected, satisfaction and attitude are significantly correlated, r(91)=.820, p<.001. Hypotheses 1a and 1b were supported. Participants who did not envision encountering another at the
time of the car rental indicated greater satisfaction ($F(1,91)= 13.231, p<.001$) and a better attitude ($F(1,91)= 6.632, p=.012$) towards the service. The means are reported in Table 1.

Table 1. Mean Values and Standard Deviations by Encounter, Study 1a

<table>
<thead>
<tr>
<th>DV</th>
<th>No Encounter</th>
<th>Encounter</th>
<th>$F$-statistic</th>
<th>$p$-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>5.51 (.87)</td>
<td>4.67 (1.31)</td>
<td>13.231</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Attitude</td>
<td>5.69 (1.15)</td>
<td>4.94 (1.59)</td>
<td>6.632</td>
<td>.012</td>
</tr>
<tr>
<td>Disgust</td>
<td>2.06 (1.23)</td>
<td>2.84 (1.40)</td>
<td>8.235</td>
<td>.005</td>
</tr>
</tbody>
</table>

Higher values indicate higher levels of satisfaction, attitude or disgust

Support was also evident for Hypothesis 2. Participants experienced more disgust when imagining encountering the prior user, $F(1,91)= 8.235, p=.005$. The bootstrap method (Preacher and Hayes 2008; Zhao, Lynch and Chen 2010) using 10,000 samples tested for mediation. Finally support was found for Hypotheses 3a and 3b because zero was not included in either confidence interval. Disgust does partially mediate the relationship between encounter and satisfaction and attitude. Participants who imagined encountering the prior user experienced more feelings of disgust which led to decreased satisfaction (95% CI [-.46, -.03]) [H3a] and attitudes (95% CI [-.78, -.07]) [H3b]. The relationships are represented in Figures 1 and 2.

![Figure 1. Hypothesis 3a: Mediation Model for Satisfaction](image-url)
Table 2 displays the results of the mediation analysis. The results from this study will be discussed in conjunction with the results from Study 1b, which is a replication of Study 1a using a different context, bike rentals.

Table 2. Results of Mediation Analysis, Study 1a

<table>
<thead>
<tr>
<th></th>
<th>Coeff.</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Main Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encounter → Disgust</td>
<td>.67*</td>
<td>.29</td>
</tr>
<tr>
<td>Encounter → Satisfaction</td>
<td>-.65**</td>
<td>.22</td>
</tr>
<tr>
<td>Encounter → Attitude</td>
<td>-.39*</td>
<td>.25</td>
</tr>
<tr>
<td>Disgust → Satisfaction</td>
<td>-.28***</td>
<td>.08</td>
</tr>
<tr>
<td>Disgust → Attitude</td>
<td>-.52***</td>
<td>.09</td>
</tr>
<tr>
<td><strong>Indirect Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encounter → Satisfaction (via disgust)</td>
<td>-.20*</td>
<td>.10</td>
</tr>
<tr>
<td>Encounter → Attitude (via disgust)</td>
<td>-.35*</td>
<td>.18</td>
</tr>
</tbody>
</table>

Notes: Analysis was conducted using 10,000 bootstrap samples. *p<.05, **p<.01, ***p<.001.

**STUDY 1B: INFLUENCE OF ENCOUNTERING ANOTHER USER ON AFFECTIVE RESPONSES TOWARDS A BIKE RENTAL SERVICE**

Given that understanding of the social element in renting behavior is still nascent, it is important to conduct replication studies to determine if findings are consistent or to
add boundary conditions. To achieve this, bike rentals are substituted for the car rental context used in Study 1a. Bike rental programs have existed in Europe since 1965. Currently, almost every major US city has some form of a bike rental program available, such as Capital Bikeshare in DC, B-Cycle in Denver, Nice Ride in Minneapolis (USDOT Federal Highway Administration 2012). These programs are designed for short-term usage and are low cost for participants.

Method

Overview

Study 1b uses the same 2-cell between-subject experimental design as in Study 1a and includes Mturk workers who were compensated $0.15 for their participation. Ninety-nine participants ($M_{age}= 36.4$ (12.81), 51.6% female) completed the study. Ages ranged from 18 to 70-years-old. Forty-nine participants were assigned to the no encounter condition and fifty were assigned to the encounter condition.

Procedure

Participants were asked to envision that they had received a free one hour trial offer for a new bicycle rental service. Participants received a description of the rental service and reservation process. Half of the participants were then informed that they viewed the bike they rented at the kiosk when they went to pick up their rental. The other
half were instructed that upon arrival at the kiosk they saw someone getting off of the bike they had selected to rent. The same procedure was followed regarding completion of the questionnaire.

**Dependent Variables**

The same dependent variables from Study 1a were used. Following are the Cronbach’s alphas for the multi-item indices used in this study: attitude (α = .962) and disgust emotions (α = .868).

**Results**

All 99 participants correctly answered the attention check question. ANOVA was used in analysis. There was support for Hypotheses 1a, 1b and 2. Participants who did not envision encountering the prior user during their bike rental were more satisfied, (F(1,98) = 8.602, p = .004) and had a better attitude toward the bike rental service, (F(1,98) = 8.171, p = .005). Those who did not imagine encountering the prior user also indicated experiencing less disgust, F(1,98) = 4.272, p = .041 (H3). The means are displayed in Table 3.
Table 3. Mean Values and Standard Deviations by Encounter, Study 1b

<table>
<thead>
<tr>
<th>DV</th>
<th>No Encounter</th>
<th>Encounter</th>
<th>(F)-statistic</th>
<th>(p)-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>5.47 (1.14)</td>
<td>4.76 (1.26)</td>
<td>8.602</td>
<td>.004</td>
</tr>
<tr>
<td>Attitude</td>
<td>5.77 (1.21)</td>
<td>5.07 (1.25)</td>
<td>8.171</td>
<td>.005</td>
</tr>
<tr>
<td>Disgust</td>
<td>2.07 (1.22)</td>
<td>2.57 (1.21)</td>
<td>4.272</td>
<td>.041</td>
</tr>
</tbody>
</table>

Higher values indicate higher levels of satisfaction, attitude or disgust.

Bootstrapping (Preacher and Hayes 2008; Zhao, Lynch and Chen 2010) is again used to test for mediation and the results are displayed in Table 4. Hypothesis 3a is supported as zero is not included in the confidence interval, (95% CI [-.44, -.01]. Hypothesis 3b is also supported, (95% CI [-.51, -.02]. Imagining encountering the prior user led to increased feelings of disgust which subsequently negatively influenced affective evaluations of the bike rental service.

Table 4. Results of Mediation Analysis, Study 1b

<table>
<thead>
<tr>
<th></th>
<th>Coeff.</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model Main Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encounter (\rightarrow) Disgust</td>
<td>.50*</td>
<td>.24</td>
</tr>
<tr>
<td>Encounter (\rightarrow) Satisfaction</td>
<td>-.55*</td>
<td>.23</td>
</tr>
<tr>
<td>Encounter (\rightarrow) Attitude</td>
<td>-.53*</td>
<td>.24</td>
</tr>
<tr>
<td>Disgust (\rightarrow) Satisfaction</td>
<td>-.31**</td>
<td>.10</td>
</tr>
<tr>
<td>Disgust (\rightarrow) Attitude</td>
<td>-.36**</td>
<td>.09</td>
</tr>
<tr>
<td><strong>Indirect Effects</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encounter (\rightarrow) Satisfaction (via disgust)</td>
<td>-.16*</td>
<td>.09</td>
</tr>
<tr>
<td>Encounter (\rightarrow) Attitude (via disgust)</td>
<td>-.18*</td>
<td>.12</td>
</tr>
</tbody>
</table>

Notes: Analysis was conducted using 10,000 bootstrap samples. *\(p<.05\), **\(p<.01\), ***\(p<.001\).

Discussion

The results of studies 1a and 1b provide evidence that the presence of others in a rental context influences affective responses towards the rental service. Findings indicate
that when participants do not imagine encountering another user, greater satisfaction and a more favorable attitude towards the rental service are anticipated. For both cars and bikes, imagining observing others using the product in a rental context negatively influences affective responses.

Not imagining encountering the prior user also leads participants to experience less disgust. This finding is consistent with previous research on consumer contamination. Disgust partially mediates the relationship between an encounter and evaluations also aligns with prior research (Argo, Dahl and Morales 2006; Morales and Fitzsimmons 2007). Observing others using a rental product makes salient the fact that other people use and touch the same product that will be used by the participant leading to feelings of disgust. The imagined encounter, both directly and indirectly through feelings of disgust, effects affectsive evaluations of the rental service. The findings from studies 1a and 1b demonstrate that imagining encountering the prior user is clearly influential in evaluations of the rental experience. In the next study, the effects of having information about a person prior to encountering them using the rental product are investigated.

STUDY 2: EFFECTS OF ENCOUNTERING ANOTHER USER AND INFORMATION ON AFFECTIVE RESPONSES TOWARDS A CAR RENTAL SERVICE

Consumers can find out information about other users of a rental service in many ways. Study 1a and 1b examined the effects of an imagined encounter with the prior user at the time of product usage. Study 2 explores whether information about other users
provided online prior to product usage will also influence affective responses. There are many methods that companies could employ to share information online about its users. The method chosen for this research is through the usage of avatars.

**Online Information About Other Consumers**

Online, companies can require or request users to display information regarding identity, interests, background or photos of themselves, in order to engage with others or post a review on a company page (Ma and Agarwal 2007). Consumers may not always want to share personal or identifying information with people they do not know. One way to allow for partial anonymity online is through the use of avatars. Avatars are digital visual representations of the self online (Hemp 2006). Avatars allow for people to be identified individuals without being identifiable, thus offering some degree of anonymity regarding personal information.

Avatars can be customized by the individual in ways that typically express the personality or social attitude the individual wants to display (Golder and Donath 2004; Kim and Baker 2007). Kraut, Fussell and Siegel (2003) showed that having visual information about other participants aids in communication and community participation. Providing information also allows individuals to present information about themselves so that others do not rely on stereotypes to make inferences about them (Ma and Agarwal 2007). Viewers of an avatar use these visual cues to make an assessment of personality traits of the person the avatar represents (Bélisle and Bodur 2010). Avatars clearly serve
as sources of information for people to learn more about with whom they are interacting online.

Blanchard and Markus (2004) conducted a study of an online sports community and demonstrated that identification of members beyond just names is an important antecedent to building a sense of community. If people are going to become part of a community, clearly knowledge of others is vital. Avatars easily convey basic information such as age, sex and race of users without violating an individual’s privacy concerns. Avatars have been shown to increase intentions to interact with other members of an online community (Kim and Baker 2007). The use of an avatar balances competing goals related to sharing information about an individual. An avatar allows for the provision of basic information for evaluation by others but does not completely eradicate an individual’s privacy. Learning information online about other users should impact one’s sense of community as well as their feelings of anonymity.

Reduction of Anonymity Among Users

Reduced anonymity is considered an antecedent of community. Anonymity is conceptualized as when an individual cannot be identified by others (Zimbardo 1969). Social distance is partially calculated from available information about others, such as their age, sex and race. When the other users are anonymous they cannot be identified and therefore no information is available to evaluate social distance. Anonymity both hinders the ability to evaluate social distance and decreases sense of community.
Besides being a detractor of sense of community, anonymity has been shown to foster anti-social behavior and reduce the regulatory function of social norms (Davis 2002; Reicher, Spears & Postmes 1995). Some studies have shown that anonymity leads to increased likelihood of engaging in inappropriate behaviors, such as driver aggression (Ellison-Potter, Bell & Deffenbacher 2001). Anonymity can also contribute to social loafing, or the tendency for individuals to expend less effort when working collectively compared to when working individually because their effort is less attributable (Karau and Williams 1993). Anonymity between users can be particularly troublesome with rental products. If users are anonymous from the others there may be increased likelihood of engagement in the undesirable behaviors just described. In the rental scenario depicted in the current research, an individual’s experience is dependent on the prior user’s willingness to engage in extra-role behaviors given the absence of intermediaries. Employing methods to reduce anonymity among users should have the benefit of reducing the incidences of adverse behaviors ensuing from anonymity.

Reduction of anonymity among users of a rental product could occur in many ways. One way is encountering another user at the time of product usage. Another method for reducing anonymity is providing information about other users online through avatars. Creating avatars to represent users online allows them to present their age, sex, race and name to others without completely sacrificing privacy. Once anonymity among users is reduced, it is possible for feelings of community to flourish.
Brand Communities

One type of community studied in marketing is the brand community where a group is united by their shared interest in a common brand (Algesheimer, Dholakia and Hermann 2005; McAlexander, Schouten and Koenig 2002; Muniz and O’Guinn 2001). Feelings of community can lead to long-term brand loyalty and donations in the university setting (McAlexander, Koenig and Schouten 2005; McAlexander, Koenig and Schouten 2006) and commitment to the brand (Muniz and Schau 2005). Many positive outcomes, such as loyalty and continuity of relationships are associated with the creation of community. Research on communal public goods emphasizes the struggle which occurs in getting people to care for something they do not own but rather share with others, termed the tragedy of the commons (Hardin 1968). Shultz and Holbrook (1999) suggest that creating a sense of community is one way to tackle the tragedy of the commons. A sense of community can lead to more cooperation, greater adherence to group norms and the ability to punish those not in compliance. All work to date on brand communities focuses on products that are owned. Ownership allows for the occurrence of certain rituals and customization that may not be feasible if the product is rented. It is not known if strong communities, such as the brand communities previously researched, will develop when the product is not owned.
**Operationalization of Communities**

Companies operating in the rental space attempt to form ties between users to create feelings of community. Examining the websites for many rental companies, there is an emphasis on belonging to a community after joining the service. It is readily apparent why companies would want members to feel as if they are automatically members of a community. Communal feelings could lead to many positive behaviors, such as filling the car with gas when it is needed not just at the quarter mark specified by the company or returning lost belongings to other users. Positive behaviors are often derived from the shared consciousness and sense of moral responsibility that are markers of community membership. Other positive outcomes such as increased commitment and brand loyalty are also associated with feelings of community. Jang, Olfman, Ko, Koh and Kim (2008) show that interaction with other members of a community led to increased commitment to the community which then also positively influenced loyalty. McAlexander, Kim and Roberts (2003) similarly show that integration within a brand community is a key driver of loyalty. Social bonding with others also positively influences brand loyalty (Oliver 1999). Greater barriers to exit should also be considered; when people feel as if they are part of an online community, they are more likely to participate and less likely to leave (Dabbish, Farzan, Kraut and Postmes 2012). Social networking and evangelizing behaviors could also potentially lead to recruitment of new members through the spread of positive word-of-mouth.

Communities, however, are dynamic entities and require the engagement and buy-in of their members to develop. They cannot be created simply because a company wants
a community to exist. Bardhi and Eckhardt (2012) interviewed users of a short-term car rental service (Zipcar) and found no evidence of the markers indicative of a community; rather, users of the service indicated no desire to connect with other users. Participants interviewed negatively reacted to the company branding on cars that indicated the cars were rented not owned. The company states that part of the reason for branding is allowing for Zipcar users to recognize other “Zipsters” on the road. Users of Zipcar instead viewed the company branding as self-promotion for Zipcar and experienced shame knowing that other drivers could identify the car as a rental. If a strong sense of community and its associated benefits are to exist, bonds between members must first be established and develop authentically rather than by mandate. Members have to engage with other members and create the social bonds, rituals and other practices associated with belonging to a community. For that to occur, social distance between users of the rental products must be reduced. Whether feelings of community can exist when a product is rented is therefore a key dependent variable in the current research.

Hypotheses have already been presented regarding the effects of an encounter with the prior user on satisfaction, attitude and disgust. Now, hypotheses regarding online information provided about other users through avatars are proposed:

**H4:** Participants will perceive less anonymity when (a) encountering the prior user and (b) online information regarding age, sex, race and name is provided to them about the prior user of the rental product.
**H5:** Participants will feel a greater sense of community if they (a) encounter the prior user and (b) have online information regarding age, sex, race and name about the prior user of the rental product.

**Method**

**Overview**

Studies 1a and 1b demonstrated that encountering another user in the rental context of a car or bike influences affective evaluations of the experience. Encountering the prior user before the current renter was going to use the product led to less satisfaction and less favorable attitudes as well as heightening disgust emotions. Study 2 investigates how providing online information about the prior user of the rental product adds or detracts from affective evaluations of the rental experience. One context, short-term car rental, is used. It is expected that the findings from Studies 1a and 1b regarding Hypotheses 1-3 will be replicated. In addition, Hypotheses 4-5 are empirically tested.

One hundred twenty-three participants ($M_{age} = 35.4$ (11.68), 42.7% female) were recruited from Mturk and received compensation of $0.30 for their time. The ages of participants ranged from 18 to 66-years-old. The monetary payment was increased from Study 1 because Study 2 required more time to complete. The design is a 2 (encounter prior user: yes, no) x 2 (online information: yes, no) between-subjects experimental design and participants were randomly assigned to each condition. Cell sizes ranged from 28 to 31.
Procedure

The same procedure from Study 1 was used with one exception: half of the participants viewed online information about the prior user’s age, sex, race and name in the form of an avatar. Participants in this condition received the following additional information after reading a description of the car rental service:

The car rental service also posts an avatar of the person when they make a reservation to use a car.

Upon signing up for the car rental service, each member creates their own avatar. A basic template of a human face is provided and then the member can customize the avatar so it represents them. They are also encouraged to use their first name with their avatar.

The avatar serves as an online identifier for the person throughout the car rental service system. It also allows users to learn some basic information about other people who use this service but at the same time keeps everyone's identity confidential.

Below is the avatar of the person using the rental car before you:

Laura

The description ensures that participants understand what an avatar is and that their creation is by the actual user and is not generated by the rental service company based on an uploaded photo or driver’s license. The narrative also explains the purpose of an avatar in this context and that it is supposed to be representative of one’s actual
physical characteristics in case any participants are unfamiliar with avatars. Additional questions included as dependent variables will be discussed subsequently.

**Dependent Variables**

The same dependent variables from Study 1 were used. Cronbach’s alphas are presented for the following indices which were created using the same items from Studies 1a and 1b: attitude (α= .960) and disgust emotions (α= .882). New questions were added to assess felt anonymity and feelings of community towards other members of the rental service. To determine anonymity, participants indicated their agreement to the statement “I feel anonymous from other users of this car rental service” using a seven point Likert scale anchored with strongly disagree/strongly agree. The anonymity measure was created for the study since no scales or individual items assessing anonymity in this manner currently exist. Sense of community was assessed with a one item measure, “I do not feel a spirit of community within the car rental service community,” using a seven point scale and the answers were reverse coded. This measure was adapted from Algesheimer, Dholakia and Herrmann’s (2005) work on European car clubs.

**Results**

Although 123 participants completed the study, the data from six were removed from analysis for missing the attention check measure. ANOVAs were used to analyze Hypotheses 1 and 2. Support was evident for Hypotheses 1a and 1b. Participants who did
not encounter the prior user at the time of product rental assessed the car rental service more satisfactorily, \( (F(1,113)= 4.053, p=.046) \) and had a more favorable attitude, \( (F(1,113)= 3.904, p=.05) \). For Hypothesis 2, participants encountering the prior user indicated greater disgust emotions, \( (F(1,113)= 10.214, p=.002) \). The means for all dependent variables are presented in Table 5.

Support was also found for Hypotheses 3a and 3b which tested for mediation via disgust using the bootstrapping method with 10,000 samples (Preacher and Hayes 2008; Zhao, Lynch and Chen 2010). Neither confidence interval included zero suggesting that disgust does partially mediate the relationship between imagined encounter with the prior user and satisfaction (95% CI [-.48, -.08]) and attitude (95% CI [-.56, -.07]). Table 6 shows the results of the mediation analysis.

ANOVA’s were also used to test Hypotheses 4 and 5. Findings show that an encounter with the prior user significantly reduced feelings of anonymity, \( F(1,113)= 22.950, p<.001 \), demonstrating support for H4a. H4b was not supported, \( p>.05 \). Participants who viewed online information about the prior user, in the form of an avatar, did not feel less anonymous than those who did not view any online information regarding the prior user.
### Table 5. Mean Values and Standard Deviations by Encounter and Online Information, Study 2

<table>
<thead>
<tr>
<th>DV</th>
<th>No Encounter</th>
<th>Encounter</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>5.55 (.99)</td>
<td>5.36 (1.16)</td>
<td>5.46 (1.07)</td>
</tr>
<tr>
<td>No Information</td>
<td>5.77 (1.01)</td>
<td>5.18 (1.02)</td>
<td>5.48 (1.05)</td>
</tr>
<tr>
<td>Totals</td>
<td>5.66 (.99)</td>
<td>5.27 (1.09)</td>
<td></td>
</tr>
<tr>
<td><strong>Attitude</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>5.76 (1.14)</td>
<td>5.32 (1.39)</td>
<td>5.55 (1.27)</td>
</tr>
<tr>
<td>No Information</td>
<td>5.62 (1.11)</td>
<td>5.17 (1.27)</td>
<td>5.40 (1.20)</td>
</tr>
<tr>
<td>Totals</td>
<td>5.69 (1.12)</td>
<td>5.24 (1.32)</td>
<td></td>
</tr>
<tr>
<td><strong>Disgust</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>2.03 (1.17)</td>
<td>2.82 (1.23)</td>
<td>2.41 (1.26)</td>
</tr>
<tr>
<td>No Information</td>
<td>2.04 (1.05)</td>
<td>2.66 (1.31)</td>
<td>2.34 (1.21)</td>
</tr>
<tr>
<td>Totals</td>
<td>2.04 (1.10)</td>
<td>2.74 (1.26)</td>
<td></td>
</tr>
<tr>
<td><strong>Felt Anonymity</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>4.94 (1.59)</td>
<td>3.79 (1.42)</td>
<td>4.39 (1.61)</td>
</tr>
<tr>
<td>No Information</td>
<td>5.13 (1.04)</td>
<td>3.86 (1.35)</td>
<td>4.52 (1.35)</td>
</tr>
<tr>
<td>Totals</td>
<td>5.03 (1.34)</td>
<td>3.82 (1.38)</td>
<td></td>
</tr>
<tr>
<td><strong>Sense of Community</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information</td>
<td>4.13 (1.86)</td>
<td>3.46 (1.55)</td>
<td>3.81 (1.74)</td>
</tr>
<tr>
<td>No Information</td>
<td>3.40 (1.38)</td>
<td>3.96 (1.23)</td>
<td>3.67 (1.33)</td>
</tr>
<tr>
<td>Totals</td>
<td>3.77 (1.67)</td>
<td>3.71 (1.41)</td>
<td></td>
</tr>
</tbody>
</table>

Higher values indicate higher levels of satisfaction, attitude, disgust, felt anonymity and sense of community

### Table 6. Results of Mediation Analysis, Study 2

<table>
<thead>
<tr>
<th>Coeff.</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Main Effects</td>
<td></td>
</tr>
<tr>
<td>Encounter → Disgust</td>
<td>.70**</td>
</tr>
<tr>
<td>Encounter → Satisfaction</td>
<td>-.15</td>
</tr>
<tr>
<td>Encounter → Attitude</td>
<td>-.20</td>
</tr>
<tr>
<td>Disgust → Satisfaction</td>
<td>-.34***</td>
</tr>
<tr>
<td>Disgust → Attitude</td>
<td>-.35***</td>
</tr>
<tr>
<td>Indirect Effects</td>
<td></td>
</tr>
<tr>
<td>Encounter → Satisfaction (via disgust)</td>
<td>-.24*</td>
</tr>
<tr>
<td>Encounter → Attitude (via disgust)</td>
<td>-.25*</td>
</tr>
</tbody>
</table>

Notes: Analysis was conducted using 10,000 bootstrap samples. *p<.05, **p<.01, ***p<.001.
For Hypothesis 5a, no support was evident, indicating that encountering the prior user did not lead to feelings of community. There was also no main effect for online information about the prior user on sense of community, $p > .05$, indicating no support for H5b. However, a significant unpredicted interaction regarding sense of community was discovered in the analysis, $F(1,113)= 4.708, p = .032$. Specifically, the interaction was driven by the condition with no encounter with the prior user and was significant at the .10 level. If online information about the prior user was viewed and there was no encounter, participants indicated they felt a greater sense of community, $F(1,59)= 3.013, p = .088$. When an encounter with the prior user was imagined, there was no difference in sense of community between those who had online information about the prior user compared to those who did not, $p = .187$. The interaction found for sense of community is displayed in Figure 3.

![Figure 3. Effects of Encounter and Information on Sense of Community, Study 2](image-url)
Discussion

The results from Study 2 provide additional support that encountering the prior user at the time of product usage leads to lower affective evaluations for satisfaction and attitude. This encounter with the prior user also increases feelings of disgust. These findings align with the results of Studies 1a and 1b. Replicating past results is imperative given the paucity of empirical research on renting. Imagining encountering the prior user of the rental product is quite influential and needs to be taken into account.

The findings that providing online information about other users is not sufficient in reducing anonymity is somewhat unexpected. A possible explanation is that participants felt they were able to maintain their own anonymity since they did not have to share their own information. The dependent measure assessed their own felt anonymity not the other users anonymity. Many potential benefits arise from the reduction of anonymity. Analysis showed that encountering the prior user was successful in reducing feelings of anonymity. However, given the other findings that an encounter increases feelings of disgust and results in less favorable affective responses, companies should not pursue creating encounters between users as a strategy to reduce feelings of anonymity and achieve associated outcomes such as reduced social loafing. Companies need to find alternative ways to reduce anonymity in a manner that will not lead to undesirable evaluations on other important dimensions such as satisfaction and attitude.

In theory, providing information online about the prior user should enhance sense of community. It appears that encountering the prior user did not have an impact on sense
of community. In addition, knowing the age, sex, race and name of the prior user from information provided online should positively influence community. Information about others is the starting point for building social connections. As Blanchard and Markus (2004) showed, knowing information beyond names is an important antecedent to community formation. In this study, half of the participants were provided the age, sex, race and name of the prior user with the belief that this online information would positively influence evaluations of community. Instead, rather than having a direct impact on evaluations, online information provided in the form of an avatar was only influential when the prior user was not encountered. In this study, participants could acquire information about other users in one of two ways: either through an encounter at time of product usage or online through information provided in the form of an avatar. It appears that participants only used one piece of information in determining sense of community. If no information was provided about the prior user via the online avatar or the encounter, feelings of community were lowest, as evidenced by the means for this condition, $M_{community} = 3.40$. However, the second lowest means occurred when information was acquired both through an encounter and online with an avatar, $M_{community} = 3.46$. Receiving information about others through both channels did not lead to a significant increase in sense of community. This finding aids companies operating in the short-term rental context by showing that companies can promote a sense of community among users when the prior user is not encountered and information is provided online. In Study 3, additional outcomes related to community are further explored.
STUDY 3: EFFECTS OF ENCOUNTERING ANOTHER USER AND COMMUNICATION REGARDING CLEANING ON AFFECTIVE RESPONSES TOWARDS A CAR RENTAL SERVICE

There are many positive outcomes related to experiencing a sense of community. As previously discussed, community is pursued as one way to overcome the tragedy of the commons. In the rental context, the tragedy of the commons is also the lack of care for a communal product. This study explores whether feelings of community can influence expectations and motivate people to engage in care behaviors. In addition, one method for users to communicate with each other is examined.

Trust and Confidence in Other Users

In access-based consumption without intermediaries, consumer participation is necessary to complete tasks associated with the rental product. The rental companies as well as users are dependent on both past and future users to complete these tasks. There are numerous ways to convey that a task has been completed. One can visually observe this action, have implicit trust in another that the action was completed, see a checked box confirming an action or read a note stating that an action took place. However, the levels of trust and confidence associated with each of these actions may vary. Trust is defined as “a willingness to rely on an exchange partner in whom one has confidence” (Moorman, Zaltman and Deshpandé 1992, 315). Trust involves vulnerability and
uncertainty. One does not have to have trust if one can observe the completion of an activity as it removes uncertainty in the situation.

However, in many other situations, people are reliant on others to do what they say they will do. This reliance on others is known as interpersonal trust, or a “reliance upon information received from another person about uncertain environmental states and their accompanying outcomes in a risky situation” (Schlenker, Helm, and Tedeschi 1973, 419). When relationships are ongoing, people can utilize past experiences to assess one’s trustworthiness and truthfulness (Gahagan and Tedeschi 1968). Not all relationships are ongoing and one must make a decision to trust based on the information at hand. People are particularly suspicious of and less likely to trust those belonging to an out-group (Wilson 1971). Research has shown that cooperation and trust are greater when participants reside within the same social group, suggesting another result of in-group bias (Bowles and Gintis 2004). With renting, other users are often unknown others with whom one does not have a basis to innately trust. The literature suggests that there is suspicion and lack of trust towards unknown others, particularly in recognition that individuals are motivated to both act of group interest and self-interest (Ferrin, Bligh and Kohles 2007). Therefore, it is unlikely that users of a rental service will have confidence or trust in other users; there is simply no reason why they should believe that group interest will trump self-interest.

It is proposed that companies in the rental domain can try to encourage acting out of group interest by (1) facilitating communication among users or (2) relying on a sense of community. Communication has been shown as a particularly effective means for fostering cooperation (Insko, Scholper, Drigotas, Graetz, Kennedy, Cox and Bornstein
Communication is often viewed as a form of monitoring, or a behavior that provides information regarding another party (Ferrin et al. 2007). Because many people engage in reciprocal behaviors, monitoring allows a party to know whether they should continue to cooperate or defect because the other party is not cooperating (Lewicki, Saunders and Barry 2006). Reciprocation of positive behavior is vital for all organizations to progress which partially explains why organizations spend time engaging in trust and culture building activities in the workplace.

**Types of Communication between Users**

One way to examine different types of communication between people uses attribution theory. Attribution theory considers individual perceptions of the cause of another person’s behavior (Kelley and Michela 1980). People then use their perceptions to form causal judgments (Fiske and Taylor 1991). For example, did someone fail an exam because they are not smart or because there was an emergency that prevented them from adequately preparing? When people have limited information about another person they often rely on their preconceptions to make attributions (Kelley 1973). Systematic biases may exist where a person projects their own preconceptions onto the situation in making inferences (Ferrin and Dirks 2003). One aspect of attribution theory is correspondence bias or the belief that a person’s actions are attributable to personal forces (individual characteristics) or environmental forces (non-individual characteristics) (Heider 1958). Heider (1958) postulated that if actions are attributable to personal forces then that behavior serves as information about an individual’s characteristics but if
actions are attributable to environmental forces, the action should not be used in making judgments about the person’s individual characteristics.

Expanding this conceptualization, participants may use attribution theory to determine whether they should have confidence in information provided by other users. Should confidence vary as a result of whether the information is generated and executed by the prior user or generated by a company and executed by the prior user? Analogous to this behavior is trust in company-generated content vs. user-generated content. It is the difference between being a passive consumer of content, such as liking a company page on Facebook, or an active creator of content, such as creating a fan page for a company’s product on Facebook. Consumers often rely on their peers for unfiltered information and opinions when making decisions rather than solely on information provided by companies (O’Connor 2008). Information from consumers is often viewed as more trustworthy than information from marketers (Smith, Menon and Sivakumar 2005). Social trust encapsulates this idea of trusting others. On the internet, social trust is operationalized as trusting other users even though you do not know them personally and using information provided to make decisions, such as which movie to see or which hotel to stay (Golbeck 2008). Given that consumers are more likely to trust user-generated content than company generated content, the following hypotheses are formally proposed:

H6: Participants who view a note about cleaning behaviors generated by a consumer rather than the company will indicate greater confidence that the prior user completed the cleaning action.
**H7:** Greater confidence that the prior user completed the cleaning action will partially mediate the relationship between the originator of the note viewed and own willingness to engage in a cleaning action.

**H8:** Participants who view a note generated by a consumer rather than the company will indicate feeling a greater sense of community.

### Markers Associated with Communities

As previously stated, communication between users is a direct way for letting others know that an action was completed. A more subtle way to generate trust and confidence that others did as they said is through a sense of community. Prior research suggests that many positive outcomes exist in communities. There are clear ways to determine whether a community exists. Muniz Jr. and O’Guinn (2001) found three key markers of communities: shared consciousness, rituals and traditions and sense of moral responsibility. Shared consciousness is the connection and sense of belonging that members of a community feel toward one another. Rituals are meaningful shared practices that perpetuate the history and culture of a community. Moral responsibility is the sense of obligation to both individual members and the community as a whole. Collectively, these markers demonstrate the power of communities. Communities serve as a foundation of belonging and there are obligations associated with membership, mainly a sense of duty and moral responsibility to other members.
Effects of Moral Responsibility

The effects of moral responsibility towards other members of a community will likely be visible in intended care of rental products and expectations of others. Moral responsibility suggests that there is an obligation to other members of a clearly delineated community (Shoemaker 2007). Membership requires willingness to adhere to the morals expressed by the group, based upon interpersonal relationships (Strawson 2003). In the context of rental, feelings of community generated by who originated the note viewed should positively influence a user’s intended care, both in general and through specific actions, and sense of responsibility as well as expectations of others care. The following hypotheses are proposed:

**H9:** Sense of community will partially mediate the relationship between, a) participant’s own care, b) expectations of other users’ care and c) sense of responsibility and the originator of the note, with those who view a note written by another consumer experiencing a greater sense of community which will partially explain willingness to care for the rental product, higher expectations of other users’ care and a greater sense of responsibility.

**H10:** Sense of community will partially mediate the relationship between a participant’s willingness to a) wipe down the car and b) remove their trash after usage and the originator of the note, with those who view a note written by another consumer indicating a greater sense of community and
this will partially explain a greater willingness to engage in specific cleaning behaviors.

The hypotheses are also represented graphically below in Figure 4. The term “DV’s” is used to represent participant’s own care, expectations of others’ care, sense of responsibility, likelihood of wiping down the car and removing trash after usage. This figure is used to conserve space as it is representative of the expected relationship between each of the variables.

Figure 4. Hypotheses 9 & 10 Mediation Model for Sense of Community on DV’s, Study 3

Method

Overview

In Study 3, the context of a short-term car rental service is again used. In addition to imagining encountering the prior user (or not), the source of a note provided by the prior user is also manipulated. The note communicated the same message that the car had been wiped down by the prior user, but who generated the note, either company or
consumer, was manipulated. There was also a control condition where participants did not view any note. This condition was analyzed only for the outcome of disgust. The effects of each manipulation on the rental experience are assessed. Hypotheses 1-3 and 6-10 are empirically tested. One hundred eighty-one participants (M_age= 33.2 years (12.1), 45.9% Female) were recruited via Mturk. Ages of participants ranged from 19 to 75-years-old. Each participant was compensated $0.39. The monetary compensation between Study 2 and Study 3 increased because the length of the survey also increased. The experimental design is a 2 (encounter: yes, no) x 3 (originator of note: company, consumer, control) between-subjects design with random assignment to conditions.

Procedure

A similar procedure to the prior studies was used in Study 3. All participants indicated consent to participate in the study. Participants then received an explanation of the car rental service and then viewed the avatar of the prior user of the rental car they had selected to use. Next, half of the participants were told that “as you walk up, you see the rental car that you selected to use for the two hour trial” and the other half were told “as you walk up, you see someone getting out of the rental car that you selected to use for the two hour trial.” These manipulations were the same as prior studies. The next manipulations are different. One third of the participants received the following information that was generated by the company and executed by the prior user:

After you sit down in the driver's seat of the rental car, you look around at the interior of the car.

On the passenger side floor, you see a basket that contains anti-bacterial cleaning
wipes and small trash bags. There is also a laminated sign created by the company on the passenger seat that says "I wiped down the car for you" on one side and "I did not wipe down the car for you" on the other side.

The prior user left the sign facing up for you to read "I wiped down the car for you."
Another third of participants viewed this information which was both created and executed by the prior user and is the “consumer note” condition:

After you sit down in the driver's seat of the rental car, you look around at the interior of the car.

On the passenger side floor, you see a basket that contains anti-bacterial cleaning wipes and small trash bags. There are also post-it notes so that the prior user can write notes to the next user.

The prior user left a post-it note on the passenger seat that reads "I wiped down the car for you."

The final third of participants were in the “control” condition and only viewed the following information:

“After you sit down in the driver's seat of the rental car, you look around at the interior.

On the passenger side floor, you see a basket that contains anti-bacterial cleaning wipes and small trash bags.”

**Dependent Variables**

Study 3 uses the same dependent measures used in prior studies to assess satisfaction, attitude, disgust and community. The Cronbach’s alphas were α= .928 for attitude and α= .921 for disgust emotions. In addition, a number of measures were created specifically to assess cleaning and care behaviors. First, using a seven point scale anchored with not at all confident/extremely confident, participants indicated their
confidence that the prior user wiped down the car for them. Next participants indicated
their likelihood of engaging in the specific cleaning behaviors of wiping down the car and
removing trash from the car after use with a seven point scale anchored with very
unlikely/very likely. Finally, to gauge expectations of care, participants responded to the
questions of “compared to a car that you own, how much care will you show towards the
rental car” and “compared to the car you take of the rental car, what kind of care do you
think others will take” using a seven point scale with endpoints of much worse/much
better.

Results

The data from four participants was removed from analysis for missing the
attention check measure. For the analysis involving disgust, data from 181 participants
was used. For the subsequent analyses only data from 119 participants was used.
ANOVA\s were used to test Hypotheses 1 and 2. Support was not found for Hypotheses
1a or 1b, p’s>.05. There was no difference in satisfaction or attitude based on an
imagined encounter with the prior user. However, an unexpected interaction did emerge
for Hypothesis 1a, $F(1,115)= 4.219, p=.042$. This was driven by the encounter condition,
$F(1,59)= 5.763, p=.020$, where those who imagined encountering the prior user were
more satisfied when they viewed a note regarding cleaning generated by the consumer
rather than the company ($M_{\text{company}}= 5.16, M_{\text{consumer}}= 5.87$). Figure 5 displays these results.
A similar interaction to satisfaction was found for attitude (H1b), but it was only
statistically significant at the .10 level, $p=.064$. All means and standard deviations for the dependent measures are presented in Table 7.

![Figure 5. Effects of Encounter and Originator of Note on Satisfaction, Study 3](image)

There was also no support for Hypothesis 2, where participants who imagined encountering a prior user would experience more disgust than those who did not imagine encountering someone, $F(1,175)= 2.019, p=.157$. Planned contrasts were used for further analysis. When comparing the control condition to the note conditions (company + consumer) collapsed, there was no difference in feelings of disgust based on imagined encounter or no imagined encounter, $p=.774$. There is also no difference when comparing the control condition to either the company note condition or the consumer note condition for either encounter condition, $p’s>.05$. However, another unexpected interaction did emerge. Those that viewed the consumer generated note experience less disgust than those that viewed the company generated note, $F(1,59)= 5.777, p=.019$, but only when imagining encountering the prior user. These results are displayed in Figure 6.
Table 7. Mean Values and Standard Deviations by Encounter and Type of Note, Study 3

<table>
<thead>
<tr>
<th>DV</th>
<th>Type of Note</th>
<th>No Encounter</th>
<th>Encounter</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Company</td>
<td>5.75 (1.08)</td>
<td>5.16 (1.44)</td>
<td>5.44 (1.30)</td>
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<tr>
<td></td>
<td>Consumer</td>
<td>5.60 (1.16)</td>
<td>5.87 (0.73)</td>
<td>5.73 (0.97)</td>
</tr>
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<td></td>
<td>Totals</td>
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<tr>
<td></td>
<td>Company</td>
<td>5.81 (1.17)</td>
<td>5.40 (1.33)</td>
<td>5.59 (1.27)</td>
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<td></td>
<td>Consumer</td>
<td>5.48 (1.22)</td>
<td>5.87 (0.88)</td>
<td>5.67 (1.07)</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>5.64 (1.20)</td>
<td>5.63 (1.15)</td>
<td></td>
</tr>
<tr>
<td>Attitude</td>
<td>Control</td>
<td>2.04 (1.35)</td>
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<td>2.19 (1.46)</td>
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<td>Company</td>
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<td>2.45 (1.38)</td>
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<tr>
<td></td>
<td>Consumer</td>
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<td>1.98 (1.20)</td>
<td>2.06 (1.26)</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>2.08 (1.27)</td>
<td>2.37 (1.46)</td>
<td></td>
</tr>
<tr>
<td>Disgust</td>
<td>Company</td>
<td>4.40 (1.07)</td>
<td>3.95 (0.97)</td>
<td>4.16 (1.04)</td>
</tr>
<tr>
<td></td>
<td>Consumer</td>
<td>4.54 (1.12)</td>
<td>4.77 (0.84)</td>
<td>4.66 (0.99)</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
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<tr>
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<tr>
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<tr>
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<td>Others’ Care</td>
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<td>4.65 (1.38)</td>
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<tr>
<td></td>
<td>Totals</td>
<td>4.48 (1.14)</td>
<td>4.59 (1.30)</td>
<td></td>
</tr>
<tr>
<td>You Wipe Down</td>
<td>Company</td>
<td>6.07 (1.11)</td>
<td>5.45 (1.59)</td>
<td>5.75 (1.45)</td>
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<td>Totals</td>
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<td>5.51 (1.56)</td>
<td></td>
</tr>
<tr>
<td>You Remove Trash</td>
<td>Company</td>
<td>6.61 (.69)</td>
<td>6.26 (1.13)</td>
<td>6.42 (.95)</td>
</tr>
<tr>
<td></td>
<td>Consumer</td>
<td>6.37 (1.30)</td>
<td>6.23 (.94)</td>
<td>6.30 (1.12)</td>
</tr>
<tr>
<td></td>
<td>Totals</td>
<td>6.48 (1.05)</td>
<td>6.25 (1.03)</td>
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<tr>
<td>Sense of Responsibility</td>
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<td>5.73 (.91)</td>
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<td></td>
<td>Totals</td>
<td>5.64 (1.32)</td>
<td>5.62 (1.14)</td>
<td>5.63</td>
</tr>
</tbody>
</table>
Using 10,000 bootstrap samples, mediation analysis was conducted to test Hypotheses 3a and 3b (Preacher and Hayes 2008; Zhao, Lynch and Chen 2010). Disgust was not found to partially mediate the relationship between imagined encounter with the prior user and satisfaction or attitude as zero was evident in both 95% confidence intervals, H3a [-.37, .05] and H3b [-.38, .05].

ANOVA were used to test Hypotheses 6 and 8. As predicted, participants who viewed a note generated by the prior user were more confident ($M_{consumer}= 5.32$) that the prior user had actually wiped down the car when compared to those participants who viewed a note generated by the company ($M_{company}= 4.58$), $F(1,115)= 8.171$, $p=.005$. Participants who viewed a note generated by the prior user also indicated greater feelings of community ($M_{consumer}= 4.78$) than those who viewed a note generated by the company, ($M_{company}= 4.05$), $F(1,115)= 6.806$, $p=.010$. 

Figure 6. Effects of Encounter and Originator of Note on Disgust, Study 3
Hypotheses 7, 9 and 10 were tested using mediation analysis with 10,000 bootstrap samples for each analysis (Preacher and Hayes 2008; Zhao, Lynch and Chen 2010). Hypothesis 7 was supported, 95% CI [.15, .72]. Participants were more likely to engage in reciprocity, or willingness to wipe down the car when they were more confident that the prior user had also wiped down the car as inferred by the type of note they viewed. H9a and H9b were not supported as zero was found in the 95% confidence intervals, H9a [-.02, .24] and H9b [-.10, .17], indicating that sense of community did not partially mediate the relationship between type of card and own care and expectations of others’ care. There was support for H9c, 95% CI [.01, .31] Participants who felt a greater sense of community also felt a greater sense of responsibility towards the rental product. Support was also found for H10a, 95% CI [.03, .42], where participants were more likely to wipe down the care after use when they experienced a greater sense of community. However, sense of community did not positively influence a participant’s intentions to remove trash from the car after usage, indicating no support for H10b, 95% CI [-.01, .22]. Table 8 displays the results of mediation analysis for all hypotheses in Study 3.

Discussion

The results from Study 3 differ from the three prior studies in that Hypotheses 1-3 were not supported. The encounter with the prior user did not lead to less satisfaction or a less favorable attitude. In addition, who generated the note left by the prior user is only influential on satisfaction and attitude when there is no encounter. In the
Table 8. Results of Mediation Analysis, Study 3

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Coeff.</th>
<th>SE</th>
</tr>
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<tbody>
<tr>
<td>4: Model Main Effects</td>
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<tr>
<td>Encounter → Disgust</td>
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<td>.24</td>
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<tr>
<td>Encounter → Satisfaction</td>
<td>-.02</td>
<td>.18</td>
</tr>
<tr>
<td>Encounter → Attitude</td>
<td>.13</td>
<td>.18</td>
</tr>
<tr>
<td>Disgust → Satisfaction</td>
<td>-.46***</td>
<td>.07</td>
</tr>
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<td>Disgust → Attitude</td>
<td>-.47***</td>
<td>.07</td>
</tr>
<tr>
<td>Indirect Effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encounter → Satisfaction (via disgust)</td>
<td>-.14</td>
<td>.12</td>
</tr>
<tr>
<td>Encounter → Attitude (via disgust)</td>
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<td>.11</td>
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<tr>
<td>7: Model Main Effects</td>
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<td></td>
</tr>
<tr>
<td>Type of Card → Confidence</td>
<td>.74**</td>
<td>.26</td>
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<tr>
<td>Confidence → You Wipe Down</td>
<td>.51***</td>
<td>.09</td>
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<td>Type of Card → You Wipe Down</td>
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<td>Indirect Effects</td>
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<td>Type of Card → You Wipe Down (via confidence)</td>
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<td>.14</td>
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<tr>
<td>9: Model Main Effects</td>
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<td></td>
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<tr>
<td>Type of Card → Community</td>
<td>.73**</td>
<td>.28</td>
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<tr>
<td>Community → Own Care</td>
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<td>.07</td>
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<td>Community → Sense of Responsibility</td>
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<td>-.21</td>
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<td>Indirect Effects</td>
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<td>Type of Card → Own Care (via community)</td>
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<td>Type of Card → Sense of Responsibility (via community)</td>
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<td>10: Model Main Effects</td>
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<tr>
<td>Type of Card → Community</td>
<td>.73**</td>
<td>.28</td>
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<tr>
<td>Community → Wipe Down</td>
<td>.22*</td>
<td>.10</td>
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<td>Community → Remove Trash</td>
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<td>.06</td>
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<td>Type of Card → Wipe Down</td>
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<td>Type of Card → Remove Trash</td>
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<td>.20</td>
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<tr>
<td>Indirect Effects</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Card → Wipe Down (via community)</td>
<td>.16*</td>
<td>.09</td>
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<tr>
<td>Type of Card → Remove Trash (via community)</td>
<td>.06</td>
<td>.05</td>
</tr>
</tbody>
</table>

Notes: Analysis was conducted using 10,000 bootstrap samples. *p<.05, **p<.01, ***p<.001.
no encounter condition, a note generated by the consumer was related to more favorable affective responses. An imagined encounter also did not lead to more disgust in this study nor did disgust partially mediate the relationship between the encounter with the prior user and satisfaction and attitude. This was of particular note for the control condition where a replication of prior results was assumed. A possible explanation for these findings regarding the influence of disgust is that everyone in Study 3 viewed information explaining that cleaning supplies were present in the car which is markedly different from Studies 1a and 2. The mere presence of cleaning supplies may reduce feelings of disgust as it allows users to clean the car themselves. Companies can certainly take this into account and ensure that cleaning supplies are available for all users of the rental service. The presence of cleaning supplies may also cue to users the intended tasks they should perform.

The origin of the note had powerful effects on evaluations of community and confidence in others’ completion of an action. Participants had greater confidence when the note was written by the consumer rather than the company. This greater confidence also partially explains the relationship between the type of note and the current user’s willingness to engage in cleaning behaviors, indicating that there is more reciprocity in behavior when the consumer initiates communication. Participants also indicated a greater sense of community when the consumer initiates communication as opposed to a note generated by the company. From this, sense of community partially mediated the relationship between type of note and sense of responsibility and willingness to wipe down the car after usage, suggesting that both affective and behavioral responses are
outcomes associated with community in the rental context. In this instance, companies should encourage consumers to communicate directly with each other and can facilitate this type of behavior by including notecards in the car. However, the communication in this case could be viewed as positive or neutral in valence and shares relevant information. It is not known how consumers would respond to a note that was positive or neutral but does not communicate relevant information, such as “have a great day” or if the note was negative in valence.

Given that positive behaviors are shown to emerge from feelings of community, it is important to understand mechanisms that either create or detract from sense of community. Essay 3 examines methods for companies to activate these feelings of community and seeks to demonstrate the resultant associated behaviors.
CHAPTER III
DETRACTING FROM AND AMPLIFYING FEELINGS OF
COMMUNITY IN THE RENTAL CONTEXT

INTRODUCTION

After deciding to rent a room from Airbnb, a website that allows you to rent from people in over 34,000 cities and 190 countries (Airbnb.com), rather than a traditional hotel chain for your next family vacation, you go to their website to peruse available rooms. Rather than the typical pictures often associated with hotel chains that show an often impersonal lobby and tout the amenities of the hotel, the first thing that strikes you are the pictures of individual properties. Clicking on an available property, there is a picture of the owner, referenced as a “host” describing the property along with associated amenities, pictures, location and fees. If you click on the host’s image, background information and a full profile appears, listing hobbies, education, favorite travel places or anything else they have chosen to share. Although it may be disconcerting at first to share that degree of information with unknown others, it does create a degree of familiarity and potentially a bond with the host, particularly if you notice shared commonalities in appearance or likes. Reviews posted about the property also include photos of past guests and personal information about their own likes and preferences. This information is also a stark contrast to most hotel chain rental websites which do not have personal or background information about the concierge or hotel staff. There are certainly not pictures of other guests available to assess similarity with one’s self. Although reviews
may include basic demographic information such as age range, gender and purpose of trip, they are often highly anonymous and do not contain a guest’s name or identifying information.

What is the purpose of sharing this personal information with unknown others? Why would other guests want to know where their host went to university? This essay considers the effects on affective and behavioral intentions that emerge when rental companies encourage community building activities among their users. The implications of having this information about other users can detract from or enhance feelings of community or mitigate concerns with disgust are explored. In addition, behaviors that emerge and serve as markers of community are explored.

STUDY 1: EFFECTS OF ENCOUNTER WITH THE PRIOR USER AND APATHETIC PARTICIPATION ON EVALUATIONS OF A CAR RENTAL SERVICE

Findings from the prior essay demonstrated that under certain conditions online information about other users, in the form of an avatar, can create feelings of community. However, this only held true when there was no encounter with the prior user. Another finding from the prior essay was that communication among users, in the form of a handwritten note stating that cleaning behaviors were undertaken, led to increased feelings of community. It is not known though if actions undertaken by a company or consumer can detract from feelings of community. The idea of detracting from feelings of community is explored in Study 1.
Apathetic Participation

The literature on social distance suggests that learning information about others is a perquisite to creating a community. Communities have boundaries and information about others is used to determine who does or does not belong to the group. Research has uncovered many actions that promote the creation of community, such as participation in rituals and engagement with other members (Hoeffler and Keller 2002; McAlexander, Schouten and Koenig 2002; Muniz and O’Guinn 2001; Vesely, Bloom and Sherlock 2007), but what actions detract from the creation of community has received little attention in the literature.

Learning information about others is generally positively received because it aids in making evaluations. Alternatively, how that information is presented could also lead to negative evaluations if other users demonstrate what is termed “apathetic participation.” In the current research apathetic participation is described as involvement or communication with others out of requirement rather than on account of interest or enthusiasm. Participation is undertaken because the resultant outcome is desired, not because of an interest in engaging with or learning about others. One way for consumers to engage in apathetic participation is only completing the minimum requirements necessary. For example, many websites require users to register personal information before they can view or post any information or comments. If a user only makes a half-hearted attempt to complete this information and leaves spaces blank or incomplete, this would signal to others that the user does not care about the user community. Another example of apathetic participation could be not uploading a picture of one’s self or
completing an avatar profile. These behaviors serve as sources of information about other users and can influence perceptions of specific users, the community as a whole and the company. This study investigates whether apathetic participation by other users serves as deterrence to community in a rental context, as evidenced by associated behavioral outcomes.

**Evidence of Commitment to a Community**

In the marketing literature, behaviors are usually examined in regard to purchase which is usually the desired outcome or signifier of success for most companies (De Canniére, Pelsmacker and Geuens 2009; Grewal, Monroe and Krishnan 1998; Jeong and Lambert 2001; Madrigal 2000; Mittal, Kumar and Tsiros 1999; Taylor and Baker 1994; Woodside, Frey and Daly 1989; Yuan and Jang 2008; Zeithaml, Berry and Parasuraman 1996). For example, sponsors may use purchase of their products to evaluate the effectiveness of a sponsored event. Marketers tend to use purchase of a product as evidence of commitment to the product, brand and company. There is no purchase in renting, so other indicators of commitment to continued usage are necessary. Intention to sign-up for a rental service is one indicator of commitment to the rental service as well as to other users. Signing up for membership to a service signifies a desire to use the product for a set period of time. It shows willingness and desire to both belong to a community and to use the rental products. Another valuable indicator of commitment can be found in the brand community literature.
Schau, Muniz Jr. and Arnould (2009) showed that participation in a brand community brings additional value to its members through the enactment of specific practices, such as social networking, evangelizing, customizing and milestoning. The goal of social networking is to enhance ties and reinforce bonds among brand community members, emphasizing their similarity as members of the same community. Evangelizing is described as a form of impression management, spreading favorable thoughts and good will about a brand beyond the brand community.

Customizing is the practice of making a product one’s own and improving functionality to aid in achieving one’s goals. Even though a person is a member of a brand community of other equally fervent users, the desire to change and differentiate a product, making it one’s own, still exists. However, tips to improve and make a product one’s own may be shared within the brand community as a way to strengthen ties to other members. Milestoning is a way to document important experiences with a brand, such as first usage of a brand or attendance of a one hundred concerts by a particular band. Milestones allow people to build social capital within a community because other community members recognize and understand the significance of each milestone in a way that non-members would not admire (Celsi, Rose and Leigh 1993; Schouten, McAlexander and Koenig 2007). Additionally, achievement of milestones allows users to create their own narrative within a community, creating individuality even within a homogeneous community. Evidence from the brand community literature theorizes that members have social connections and responsibility towards other members of an often homogeneous community yet there is also a place for individuality (Carlson, Suter and Brown 2008; Mathwick, Wiertz and De Ruyter 2008; Muniz and O’Guinn 2001).
Individual actions are often undertaken in a way that strengthens rather than detracts from the community, as most actions demonstrate continued reverence towards the focal brand of the community.

**Community and Evangelizing**

If users do feel a sense of community in the rental context, they may be more likely to undertake specific behaviors. One type of behavior, evangelizing, is a marker of community. Evangelizing is sharing your experience and spreading positive information about the brand to others. Evangelizing can also be viewed as a specialized form of word-of-mouth recommendations (WOM).

Word-of-mouth recommendations have long been considered one of the most pervasive and influential sources of information in the marketplace with consumers commonly turning to others to seek consumption-related information, assistance, and opinions (Burnkrant and Cousineau 1975; Mahajan, Muller and Bass 1990). WOM is therefore a highly sought communication tool for marketers (Day 1971; Laczniak, DeCarol and Ramaswami 2001). Brown, Barry, Dacin and Gunst (2005) have explored how satisfaction is an antecedent to positive WOM. Only consumers that are satisfied with a product are likely to pass on positive information to others. Recommendations can significantly influence consumer decisions (Duhan, Johnson, Wilcox and Harrell 1997). Prior studies have found WOM more impactful than advertising or neutral print sources in terms of influence (Herr, Kardes and Kim 1991; Sheth 1971). In addition to creating a social bond between an evangelizer and the recipient, spreading positive WOM
recommendations to others also enhances the relationship between the evangelizer and the brand, leading to increased loyalty and enhanced attitudes (Garnefeld, Helm and Eggert 2011). Renting as a primary mode of consumption is still new to many people and goes against many of the strongly entrenched societal beliefs Americans have regarding ownership (Walsh 2011). If rental companies can assist in creating communities among their users, it is likely that evangelizers will emerge and spread positive information about their experiences. Hearing positive WOM may aid in reducing the risk people experience with trying a new mode of consumption.

In this study, linkages between sense of community and behavior are examined. It is expected that sense of community will positively influence the likelihood of signing up for and recommending a rental service to others. Formally stated, Hypotheses 6 and 7 are:

H1: Sense of community will be greater when participants view a completed avatar image of the prior user rather than an incomplete avatar image.

H2: Sense of community will mediate the relationship between completed avatar image of prior user and sign-up likelihood, with participants who feel a greater sense of community indicating a greater sign-up likelihood.

H3: Sense of community will mediate the relationship between completed avatar image of prior user and recommendation likelihood, with participants who feel a greater sense of community indicating a greater recommendation likelihood.
In Essay 2, if participants received online information about the prior user, participants saw a completed avatar image featuring the same woman named “Laura.” A completed avatar denotes that all information regarding age, sex, race and name was supplied. In this study, all participants viewed the name of the prior user. Half of participants viewed the same completed avatar used in Studies 2 and 3 of Essay 1. The other half viewed an incomplete avatar. An incomplete avatar contained a name along with a greyed out picture so that age, sex and race are indeterminate. A greyed out picture is common on many online sites and is indicative that the user has not uploaded a picture or completed their avatar image. In this study, apathetic participation was operationalized as the prior user not completing their avatar image. The greyed out picture should communicate lack of caring about other users of the rental service and possessing no desire to become part of the community. The resultant attitudes and behaviors resulting from differential information about the prior user are empirically tested.

Method

**Overview**

The effects of a completed avatar (vs. an incomplete avatar in the form of purposeful omission of identifiable information) are investigated in regard to affective and behavioral responses. A 2 (encounter: yes, no) x 2 (avatar image: incomplete, complete) between-subjects experimental design was used with participants randomly assigned to each condition. Cell sizes were between 30 and 34. One hundred thirty-three
participants ($M_{age}= 35 (11.40), 60\%$ female) were recruited from Mturk and received compensation of $0.45 for their time. Ages of participants ranged from 19 to 81-years-old. The context of short-term car rental is used.

**Procedure**

Participants responded to the recruitment advertisement and indicated consent to participate. Each participant was asked to imagine themselves in the situation that followed. First, participants were told they had a free two hour trial for a car rental service and viewed a description of the service. Then the manipulation of the avatar occurred. Half of the participants saw the following blank image of for Laura’s avatar and the other half saw the avatar of “Laura” used in empirical work previously reported. Both conditions read a description of what an avatar is as well as information on why a company would choose to use avatars. The two images shown to participants are displayed side-by-side below but each participant only viewed one image. After viewing the avatar, participants responded to a number of evaluative questions and statements about the car rental service and completed demographic information.
Dependent Variables

Sense of community was assessed with a one item measure, “I do not feel a spirit of community within the car rental service community,” using a 7 point scale and the answers were reverse coded. This measure was adapted from Algesheimer, Dholakia and Herrmann’s (2005) work on European car clubs. Two new dependent variables, likelihood of signing-up for the service (i.e., signing-up) and willingness to recommend the rental service to others, were included. Both were measured using a 7 point Likert scale anchored with very unlikely/very likely. The questions were worded as “Based on the information you have about the car rental service, how likely would you be to sign-up” and “Based on the information you have about the car rental service, how likely would you be to recommend it to others?” The measures were adapted from Ryu and Feick (2007) to reflect the car rental context.

Results

Three participants were removed, two for being non-native English speakers (specified in the recruitment protocol) and one for missing the attention check, leaving analysis of data for 130 participants. Using an ANOVA for analysis, support was found for H1. Participants perceived a greater sense of community when provided with the image of the completed avatar (vs. the incomplete avatar image), \((F(1,126)=4.416, p=.038)\). Means for all dependent variables are reported in Table 1.
Mediation analysis, using the bootstrap method with 10,000 samples was used to test Hypotheses 2 and 3. Sense of community partially mediates the relationship between avatar image and sign-up likelihood, consistent with H2, (95% CI [.08, .48]). Providing information to participants in the form of a completed avatar led to increased feelings of community, which in turn led to an increased likelihood of signing up for the rental service/product. Figure 1 depicts the model for sign-up likelihood.

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<th>Encounter</th>
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</tr>
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<td>4.22 (.93)</td>
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</tr>
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<td>4.81 (1.38)</td>
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</tr>
</tbody>
</table>

Higher values indicate higher levels of sense of community, sign-up likelihood and recommendation likelihood.
The same relationship pattern was found for recommendation likelihood (95% CI [.08, .52]), indicating support for H3. The mediation paths for recommendation likelihood are displayed in Figure 2. These results of the mediation analysis are reported in Table 2.

![Figure 1. Hypothesis 2: Mediation Model for Sign-up Likelihood](image)

![Figure 2. Hypothesis 2: Mediation Model for Recommendation Likelihood](image)

**Table 2. Results of Mediation Analysis, Study 1**

<table>
<thead>
<tr>
<th>Model Main Effects</th>
<th>Coeff.</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed avatar → Sense of community</td>
<td>.47**</td>
<td>.17</td>
</tr>
<tr>
<td>Completed avatar → Signup likelihood</td>
<td>.21</td>
<td>.23</td>
</tr>
<tr>
<td>Completed avatar → Recommendation likelihood</td>
<td>.52*</td>
<td>.25</td>
</tr>
<tr>
<td>Sense of community → Sign-up likelihood</td>
<td>.49***</td>
<td>.11</td>
</tr>
<tr>
<td>Sense of community → Recommendation likelihood</td>
<td>.52***</td>
<td>.12</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indirect Effects</th>
<th>Coeff.</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed avatar → Signup likelihood (via sense of community)</td>
<td>.23**</td>
<td>.10</td>
</tr>
<tr>
<td>Completed avatar → Recommendation likelihood (via sense of community)</td>
<td>.24**</td>
<td>.11</td>
</tr>
</tbody>
</table>

Notes: Analysis was conducted using 10,000 bootstrap samples. *p<.05, **p<.01, ***p<.001.
Discussion

The findings from this study demonstrate that an incomplete avatar does detract from sense of community. The literature regarding what deters community is paltry. It appears that most researchers are interested in ways to amplify feelings of community but have not investigated the inverse of what detracts from feelings of community. The results from this study provide evidence that apathetic participation does discourage feelings of community. Failure to complete the avatar may be interpreted by other users as that particular user not wanting to be identifiable to members of the car rental community. Conversely, when avatars were completed, participants indicated feeling a greater sense of community. Companies should take this under consideration in the design of their websites and online rental platforms. If companies are trying to promote a sense of community among their members, allowing the existence of incomplete profiles on the website is incongruent with the company’s goals.

As predicted, sense of community did partially mediate the relationship both sign-up likelihood and recommendation likelihood. When avatars were completed, the sense of community was greater which in turn positively influenced sign-up and recommendation likelihood. The carryover effects of community underscore its importance. If companies can generate feelings of community, people are more likely to sign-up for as well as recommend the rental service to others. This study shows that having information regarding the age, sex, race and name of other users is a positive component as it relates to community and does positively influence affective responses. However, in the studies thus far, all participants have viewed the same avatar and its
similarity to one’s self has not been assessed. In study 2, similarity between the participant and the avatar of the prior user is manipulated to gain understanding of how similarity influences evaluations.

STUDY 2: EFFECTS OF ENCOUNTER WITH THE PRIOR USER AND SIMILARITY ON EVALUATIONS OF A CAR RENTAL SERVICE

Similarity among users may serve to enhance feelings of community among users of a rental product. Prior research on community suggests that communities are formed around shared interests or among likeminded people (Kozinets 1999; McWilliam 2012). Study 2 investigates the effects of similarity on feelings of disgust and sense of community.

Similarity and Social Distance

Similarity to others is the belief one shares common interests and values with other people (Doney and Cannon 1997). One way to assess similarity is through the visual observation of others. Observable differences are often biological characteristics, such as age, sex and ethnicity that can be assumed from physical appearance (Jackson, Stone and Alvarez 1993). Biological characteristics are often used to make inferences in regards to a person’s values and beliefs (Fiske 1993). The assumption is that people similar on demographics are likely to also share similar backgrounds and experiences (Chatman, Polzer, Barsade and Neale 1998). Research shows that in the retail
environment, consumers tend to feel more comfortable in and prefer stores where other consumers are similar to them (Brocato, Voorhees and Baker 2012; Martin and Pranter 1989). Dickson and MacLachlan (1990) discovered that people avoid shopping at certain stores that are perceived as distant from their social class. McGrath and Otnes (1995) showed that shoppers used characteristics such as age, sex and appearance to assess similarity and were more likely to interact with other shoppers considered more similar to themselves. Similarity to others can reduce social distance because most people believe that shared physical characteristics are indicative of other shared commonalities. This type of inference is commonly known as relational demography (Tsui and O’Reilly 1989).

The majority of work on relational demography is conducted using the context of the workplace. The primary objective of the research is to understand how heterogeneity (on biological characteristics) in the workplace influences specific outcomes. In a study published in 1989, O’Reilly, Caldwell and Barnett found that age diversity within a work group led to lesser social integration and higher turnover. Other studies have shown that heterogeneity on biological characteristics leads to conflict within a team (Daft and Weick 1984; Pfeffer 1983). In a study by of employees of a hospital and a deli bakery, Harrison, Price and Bell (1998) found that initial assessments of similarity were based on surface-level demographic data (i.e. age and sex). However, over time similarities were assessed on a deeper level (i.e. satisfaction and commitment) and similarities on these characteristics are more consequential to group outcomes. The findings from this study demonstrate the fault in having a demographic bias. People need more information than simple demographics to truly uncover whether there is similarity in attitudes and values.
Unfortunately, in many instances deeper level similarities are difficult to assess. Determining degrees of similarity beyond surface characteristics requires engagement with others over time.

Preference towards Similar Others

The preference to interact with people similar to one’s self is also known as homophily, or a tendency for people to associate with others who share similar demographic characteristics (Lazarsfeld and Merton 1954). The tendency to form relationships with others who are similar on demographic characteristics is also recognized as selection bias (McPherson, Smith-Lovin and Cook 2001). Mollica, Gray and Trevino (2003) found that when entering into a new program, minority students were more likely to form and continue friendships with other minority students and this was more pronounced when race was a salient social identity for the students. This is not just true for minority students; research shows that people of all ages and races tend to befriend others who resemble themselves (Amichai-Hamburger, Kingsbury and Schneider 2013). There is a fairly robust belief that people similar on certain visible attributes must also be similar to on non-visible attributes as well, even if evidence exists which disproves this assumption.

In the current research, physical similarity using biological characteristics is studied rather than similarity based on social class or deeply-seated beliefs such as commitment to sustainability. The rationale for this is two-fold. One, using physical similarity closely mimics what actually occurs in real world rental situations. It is
unlikely that users who are unknown to each other would reveal personally held beliefs to a stranger, even if that stranger is a member of the same service. Second, physical similarity is easy to assess both online and offline and is often employed as a heuristic in the evaluation of other people. Avatars can easily represent observable biological characteristics but it is much more challenging for avatars to represent abstract characteristics such as goodness or political beliefs. Perceived similarity on biological characteristics may indirectly influence many of the variables of interest.

**Effects of Similarity**

Determination of similarity may be made immediately based on observable biological characteristics. Similarity-attraction theory suggests that people are attracted to and prefer relationships with similar others (Byrne 1971). Research has shown that when dissimilarity exists within a group, there is lower satisfaction with and commitment to the group (Mueller, Finley, Iverson and Price 1999; Riordan and Shore 1997). People tend to have greater initial liking of others when others are perceived as similar (Elfenbein and O’Reilly 2007).

Perceived similarity may also overcome the feelings of disgust that occur when imagining encountering the prior user. The prior essay demonstrated a rather robust effect of disgust as a result of encountering the prior user. However, if the prior user is perceived as more similar, consumers may indicate experiencing reduced feelings of disgust. Prior research has shown that contact with a desirable source can increase evaluations and decrease concerns with contagion (Argo, Dahl and Morales 2006;
Nemeroff and Rozin 1994; Rozin, Markwith and McCauley 1994). In this research, a desirable source is considered someone who is similar to one’s self. Perceived similarity should also positively influence sense of community because assessment of demographic similarity may lead to inferences of similarity in values as well. When avatars communicate similarity on demographic characteristics, users often infer stronger linkages and closeness to other users in the virtual community (Kim and Baker 2007). Social similarity (e.g. demographic characteristics) has been known to create a sense of community and trust (Luo 2002; Zucker 1986). Therefore, the following hypotheses are illustrated in Figures 3 and 4 and formally proposed below:

**H4:** Perceived similarity mediates the relationship between age, sex and race information about other users and feelings of disgust, where participants who perceive more similarity among users will experience less disgust.

**H5:** Perceived similarity mediates the relationship between age, sex and race information about other users and sense of community, where participants who perceive more similarity among users will have greater feelings of community.

![Figure 3. Hypothesis 4: Mediation Model for Similarity on Disgust](image-url)
Method

Overview

There are three biological characteristics often used in the assessment of similarity: age, sex and race (Allport 1954). In this study, visual similarity between participants and the prior user is manipulated using just two of these attributes: age and sex. This will aid in understanding how information displaying similarity to other users, provided through the avatar image, influences evaluations of the rental service regarding sense of community, feelings of disgust and care of the rental product. Hypotheses 4-5 are empirically tested in this study using the context of short-term car rental. For Study 2, a student sample was used. Students are appropriate to use because they are a fairly homogeneous group in regard to age. Sex is a simple variable to control for and match. Only data from Caucasian students was included in the analysis in order to match the race between participants and the avatar images used in the stimuli. Caucasian is the most prevalent race in the student body from which participants were selected. Three hundred
and sixty-one participants (M_{age}= 20.9, 46.6% female) from a large public university in the northwest participated in exchange for course credit. A 2 (encounter: yes, no) x 4 (information: same age/same sex, same age/different sex, different age/same sex, different age/different sex) between-subjects experimental design was used with participants randomly assigned to conditions. Cell sizes ranged from 27 to 33.

**Procedure**

Participants first indicated their consent to participate and their student identification number. On the next page, participants indicated their sex, age and ethnicity. Ethnicity was controlled for by having all participants that indicated a race other than Caucasian transferred to a separate study. For the remaining participants, the sex variables ensured that participants viewed an image that was either similar in age and sex (same age/sex) or differed on one or both of these attributes (same age/different sex, different age/same sex, different age/different sex). The remaining procedure is similar to the prior studies: study participants were instructed to envision themselves in the scenario where they have a free two hour trial for a short-term car rental service and then provided a description of the service. Next, information about the avatars was presented and they viewed one of the following images:
The images were crossed and matched based on age and sex so that participants either viewed an image providing information that the prior user was similar in age and sex, similar in age but a different sex, different age and same sex or different age and sex. After viewing the image, they evaluated the car rental service.

**Dependent Variables**

Participants first completed a measure that rated perceived similarity. It stated, “Based on the information you received, how similar do you think you are to the prior user of this car?” and answers were provided using a seven point rating scale (not at all similar/extremely similar). As with prior questions on disgust, participants indicated their reaction to fourteen emotions randomly presented. Using a seven point scale anchored with very unlikely/very likely, participants indicated their likelihood of experiencing each
emotion (disgusted, revolted, unclean, gross, frustrated, bad, annoyed, angry, mad, happy, hopeful, amused, cheerful, warmhearted) when using the car rental service described. A disgust index (α= .836) was again created from the four emotions of interest (disgusted, revolted, unclean, gross). The same measure used to assess sense of community in Study 1 of this essay is again used.

Results

Although 361 participants initially responded, only data from 251 participants was used in the analysis. To control for race, ninety-three participants were passed on to the next study due to their ethnic status and 17 were removed for missing the attention check item. No sex differences between conditions were evident so the cells were collapsed as planned. The similarity rating measure showed that the perceived similarity of other users was in fact different based on the avatar image viewed, $F(3, 243)= 10.111$, $p<.001$ ($M_{ss,sa}$= 4.33, $M_{ss,da}$=3.84, $M_{ds,sa}$= 3.10, $M_{ds,da}$= 3.44. Participants who viewed the avatar that depicted someone the same age and sex as themselves perceived the most similarity. Given the results on perceived similarity, the data were collapsed into two conditions: similar on both attributes or dissimilar on either attribute. The new means for perceived similarity are $M_{similar}$= 4.33 and $M_{dissimilar}$= 3.46, $F(1,249)= 18.917$, $p<.001$. Collapsing across conditions allows for a more straightforward explanation of findings for the reader. The means for all dependent variables measured in this study are shown in Table 3.
Bootstrapping (Preacher and Hayes 2008; Zhao, Lynch and Chen 2010) was used to test for mediation for Hypotheses 4 and 5. Since zero was not included in the confidence intervals, support was evident for both H4 (95% CI [-.22, -.02]) and H5 (95% CI [.01, .18]). Participants who viewed a similar avatar and perceived more similarity among users experienced less disgust (H4). In addition, participants who perceived more similarity experienced a greater sense of community (H5). The results are displayed in Table 4.

Table 3. Mean Values and Standard Deviations by Encounter and Similarity, Study 2

<table>
<thead>
<tr>
<th>DV</th>
<th>Similarity</th>
<th>No Encounter</th>
<th>Encounter</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Perceived Similarity</td>
<td>4.57 (.10)</td>
<td>3.30 (1.52)</td>
<td>4.33 (1.19)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.59 (1.53)</td>
<td>3.77 (1.31)</td>
<td></td>
</tr>
<tr>
<td>Disgust</td>
<td>2.90 (.32)</td>
<td>3.28 (1.19)</td>
<td>3.39 (1.16)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.20 (1.22)</td>
<td>3.55 (1.13)</td>
<td></td>
</tr>
<tr>
<td>Sense of Community</td>
<td>4.61 (.32)</td>
<td>4.39 (1.52)</td>
<td>4.62 (1.53)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.44 (1.47)</td>
<td>4.43 (1.45)</td>
<td></td>
</tr>
</tbody>
</table>

Higher values indicate higher levels of similarity, disgust and sense of community respectively.

Table 4. Results of Mediation Analysis, Study 2

<table>
<thead>
<tr>
<th>Coeff.</th>
<th>SE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Main Effects</td>
<td></td>
</tr>
<tr>
<td>Manipulated Similarity → Perceived Similarity</td>
<td>.87***</td>
</tr>
<tr>
<td>Manipulated Similarity → Disgust</td>
<td>.06</td>
</tr>
<tr>
<td>Manipulated Similarity → Community</td>
<td>-.09</td>
</tr>
<tr>
<td>Perceived Similarity → Disgust</td>
<td>-.12*</td>
</tr>
<tr>
<td>Perceived Similarity → Community</td>
<td>.09</td>
</tr>
<tr>
<td>Indirect Effects</td>
<td></td>
</tr>
<tr>
<td>Manipulated Similarity → Disgust (via perceived similarity)</td>
<td>-.11*</td>
</tr>
<tr>
<td>Manipulated Similarity → Community (via perceived similarity)</td>
<td>.08*</td>
</tr>
</tbody>
</table>

Notes: Analysis was conducted using 10,000 bootstrap samples. *p<.05, **p<.01, ***p<.001
Discussion

Based on the findings from this study, the impact of perceived similarity is quite notable. Perceived similarity was a significant mediator for both proposed relationships. Viewing avatar images indicating the prior user was of the same sex and age increased perceptions of similarity between participant and prior user. Perceived similarity in turn partly explained the relationship between the avatar image and sense of community and disgust. These findings are also in line with prior research. People tend to respond more favorably to others perceived as more similar. Similarity on biological characteristics is interpreted as similarity on other characteristics, values and personal background. The impact of perceived similarity underscores the importance of using avatars that mimic actual traits of human beings, making the avatars more closely resemble actual human traits. Rather than allowing for avatars with purple skin or an image of a dog on the websites, rental companies should set parameters to only allow for depiction of human characteristics. Even though other users of the rental service are unknown on less superficial characteristics, similarity on biological characteristics can result in positive outcomes.

The fact that perceived similarity reduces feelings of disgust is quite notable. In the prior studies, feelings of disgust have been rather robust and emanate from watching the prior user finish using the rental product. Promoting that others are similar on biological characteristics is one way for companies to help overcome this disgust bias. A greater feeling of community is also a positive outcome related to feelings of perceived similarity. Past work on brand communities suggest that community is related to positive outcomes.
behavioral outcomes. It appears that generating feelings of similarity among users could be a powerful mechanism to achieving many potential benefits.

In all prior studies, only information about the user directly prior has been provided. With rental services, many users of the rental product exist beyond just the prior user. For the next study, knowing information about multiple prior users is explored. Similarity in regard to participant age and sex is again incorporated to further develop the findings from Study 2.

STUDY 3: EFFECTS OF SIMILARITY AND INFORMATION ABOUT MULTIPLE USERS ON EVALUATIONS OF A CAR RENTAL SERVICE

Study 3 further develops ideas connected to similarity and community and explores related behavioral outcomes. The idea of an encounter with the prior user and its effects has been demonstrated in the prior studies and is not a point of focus in the final study. Essay 3 is focused on uncovering ways to bolster feelings of community. Study 2 explored the effects of similarity and showed that perceived similarity is positively related to greater sense of community and reduced feelings of disgust. Study 3 seeks to demonstrate how knowing information about multiple prior users rather than just an individual prior user influences perceived similarity and sense of community. In addition, building on the relationships predicted in the literature, sense of community should also lead to behavioral outcomes related to care of the rental product, both in a general sense and to specific actions.
Information Regarding Multiple Users

Currently, little research exists on how multiple people using the same product influences evaluations. The lack of research on this particular topic is understandable given the lack of research on renting in the marketing literature. In the past, researchers have examined how the presence of multiple people influences perceptions of crowd density, relating crowd density to evaluations of a retail setting (Bateson and Hui 1986; Machleit and Mantel 2001; Machleit, Eroglu and Mantel 2000). Argo, Dahl and Manchanda (2005), showed that negative emotions in a retail environment increased as a larger group of people (3) were in close proximity. Other work has demonstrated that having similar customers in a service setting leads to greater satisfaction (Pranter and Martin 1991). In addition to influencing evaluations, knowing information regarding the biological characteristics of multiple other users can also signal whether use of a product fits with the impressions an individual seeks to communicate.

Relatedly, having knowledge of who the other users of a brand or product are can lead to differential reactions to that brand or product. Information about other users allows for individuals to categorize other users on fit with a reference group. Reference groups serve dual roles. They can serve as sources of comparison for individuals (comparative) or set standards for individuals (normative) (Hyman 1942). Using the theory of social distance, Cocanongher and Bruce (1971) found evidence that individuals were likely to adapt the use of products used by favorably viewed yet socially distant reference groups. Use of these products was aspirational and indicative of desire to reduce the distance between an individual and the group. More recently, Berger and
Heath (2007) found that people’s choices for certain products converge when they want to signal belongingness to a group and diverge when seeking distance from others. Use of certain products can intimate in-group or out-group status to others (Escalas and Bettman 2003). Using Facebook fan pages as a context, Naylor, Lamberton and West (2012) showed that when a fan base of a brand was homogeneous and similar to the target audience, displaying information about fans’ biological characteristics on the fan page increased positive evaluations of a brand. Building on these findings, knowing information about multiple users may aid individuals in discerning if this is a community they want to belong to given perceived similarity to other members. Again, although information about other users can be helpful to individuals there is also a potential downside. Viewing multiple other people that use the same rented product can trigger heightened concerns with contagion since the images make salient that a number of other people use the rental product and not all are similar to one’s self on age, sex and race. The following hypotheses are therefore offered:

**H6:** Participants will indicate a greater sense of community when multiple avatars of users similar in age and sex are shown when compared to multiple avatars of users dissimilar in age and sex.

**H7:** Participants who view multiple avatars of users will experience greater disgust than participants who view single avatars of users.
Similarity and Community Effects

In addition, there is an expectation that sense of community will continue to have a positive influence on sign-up likelihood and recommendation likelihood. The relationship is anticipated to entail serial mediation with information regarding similarity in the prior user’s age, sex and race leading to increased perceptions of similarity which subsequently leads to a greater sense of community which has a positive influence on sign-up and recommendation likelihood. Other positive effects of community are also further researched. One of the indicators of an existence of community is shared moral consciousness (Muniz Jr. and O’Guinn 2001). Part of belonging to a community is adhering to social norms and shared group intentions. These intentions indicate a commitment to participate with other members in joint actions determined by the group (Tuomela 1995).

In rental contexts where intermediaries are not employed, users of the product must engage in extra-role behaviors and care for the rental product. Users must recognize that co-dependency exists for this type of rental and that the prior user directly impacts the subsequent user’s experience. When a rental product is left dirty or broken, the next user is negatively affected. If community and its markers are present, users should be more likely to demonstrate care for rented products and have expectations that others will also demonstrate care due to recognition that all members of the community are “in it together.” Therefore the following hypotheses regarding product care are proposed:
**H8:** Perceived similarity positively mediates the relationship information about other users and sense of community and sense of community positively mediates the relationship between perceived similarity and (a) sign-up likelihood and (b) recommendation likelihood.

**H9:** Perceived similarity positively mediates the relationship information about other users and sense of community and sense of community positively mediates the relationship between perceived similarity and (a) own level of intended product care and (b) expectations of other users’ intended care.

The model proposed for Hypotheses 8 and 9 is shown in Figure 5, with the term “all DV’s” used to save space. All DV’s indicates sign-up likelihood, recommendation likelihood, own level of care and expectations of other users’ care.

![Figure 5. Hypotheses 8 & 9: Mediation Model for Perceived Similarity and Sense of Community](image)
Scarcity

Another variable necessary to consider regarding similarity to other users is whether similarity will trigger concerns with scarcity. Scarcity risk is the likelihood that a product will not be available when needed (Lamberton and Rose 2012). People may assume that similar people may have similar needs. Naylor, Lamberton and Norton (2011) showed that people perceive those who are demographically similar to have similar usage patterns. Problems could arise if a limited number of products, such as cars, are available for a similar group of people. If these people have similar usage needs or patterns, demand may fluctuate at the same time creating rivalry for a limited number of products. Rivalry is the “degree to which use of the product by one consumer subtracts from the availability of the product to other consumers” (Lamberton and Rose 2012). If rivalry occurs, people may choose alternatives to renting, such as ownership, because the rental system cannot satisfactorily meet their needs. The following hypothesis is therefore proposed:

**H10:** Scarcity concerns will be greatest when multiple avatars showing users similar in age and sex are viewed.
Method

Overview

Study 3 builds upon the findings from Study 2 by providing information about multiple users of the rental product instead of just the prior user. One possibility is that participants will infer that multiple users are similar to themselves in regard to age, sex and race which will lead to enhanced feelings of community. Showing avatars of multiple users similar on these characteristics could also lead to scarcity concerns. In addition, making salient that a number of people use the same rental product may trigger greater feelings of disgust. Study 3 empirically tests Hypotheses 6-10. Participants were recruited on Mturk. Recruitment utilized a two-step process. First, participants were offered $0.08 to complete a two question inquiry on their age and race. Seven hundred sixty-five people responded ($M_{age} = 36.4$). From that original sample, 276 people were invited to take part in a follow-up study based on their demographics. In order to properly match the age and race of the participants with the stimuli, only Caucasian respondents under the age of 33 were used for the data analysis. Of the 276 people originally eligible, 202 people ($M_{age} = 26.1$ (3.83), 46.1% female) completed the study in exchange for $1.00. Ages of participants ranged from 18 to 32. The amount of money was dramatically increased for part two of recruitment to entice people to seek out and complete the study once it appeared in their queue three days later. The study design is a 2 (information: similar, dissimilar) x 2 (avatars: single, multiple) between-subjects design with random assignment to conditions. The cell sizes ranged from 48 to 53.
Procedure

The same procedure as described in Study 2 was followed with two exceptions. First, for the similarity manipulation only two levels of the condition were used. Participants either viewed an avatar(s) that matched them in sex and age or was dissimilar on both attributes. Second, participants viewed either the avatar of the person who used the rental car before them or avatars for the last four people to use the rental car. If the participant viewed four avatars, three of the avatars were similar to them in sex and all four were similar to them in age. If the multiple avatars were dissimilar, three avatars were different from them in sex and all were different in age. Regardless of whether the multiple images were similar or dissimilar to participants, all of the images were of the same ethnicity of the participants. Participants next completed the measures used to assess the dependent variables.

Dependent Variables

The same dependent variables from Study 1 were used for sign-up likelihood and recommendation likelihood and from Study 2 for perceived similarity, sense of community and disgust. To assess the general care of the rental product expected by others and the participant, participants responded to “compared to the care you take of the rental car, what kind of care do you think others will give?” and “compared to a car that you own, how much care will you show towards the rental car?” Answers used a seven
point scale anchored with much worse/much better. These questions were also used in Essay 2 Study 3.

In order to capture scarcity fears, participants were asked to indicate their level of concern “that the car would not be available when needed?” using a five point scale with endpoints of not at all concerned/extremely concerned. The measure was adapted from Lamberton and Rose’s (2012) research on scarcity concerns with car share services.

Results

The perceived similarity rating showed both a significant main effect and a significant interaction. As expected, when participants viewed an avatar that was similar to themselves in age and sex, they perceived more similarity, $M_{\text{similar}} = 4.66$, than when exposed to an avatar dissimilar in age and sex, $M_{\text{dissimilar}} = 3.38$, $F(1,198) = 54.129$, $p < .001$. A significant interaction occurred for number of avatars and similarity of image on age and sex, $F(1,198) = 4.314$, $p = .039$ where participants noted a more stark difference in similarity and dissimilarity when only viewing the avatar of one prior user. These results are displayed in Figure 6.

A means test was used to test Hypotheses 6 and 7. Support was not evident for Hypothesis 6, $p > .05$. When participants viewed multiple avatars, there was no difference in feelings of community due to similarity in image ($M_{\text{community}} = 4.33$) when compared to non-similar images ($M_{\text{community}} = 3.87$). Support was also not found for Hypothesis 7, $p > .05$. There was no difference in feelings of disgust based on viewing an image of one
avatar (M_{disgust}= 2.39) when compared to viewing multiple avatar images (M_{disgust}= 2.25). The means for all measured variables are shown in Table 5.

![Figure 6. Effect of Similarity & Number of Avatars on Perceived Similarity, Study 3](image)

To test for mediation for Hypotheses 8 and 9, separate path models were estimated for each dependent variable using AMOS V20.0 (Arbuckle 2006). In order to evaluate the significance of the indirect effects, bootstrapping (N = 2,000 replications) was used to estimate bias-corrected standard errors (Shrout and Bolger 2002). The paths from manipulated similarity to perceived similarity, perceived similarity to community and community to sign-up likelihood were all significant, p’s<.001. Figure 7 shows the paths in the model with standardized regression coefficients. Support was evident for H8a. There are two significant indirect effect paths. The standardized indirect effect of the similarity manipulation on sense of community via perceived similarity is significant, (b=.13, p=.005, 95% CI [.07, .22]) and will be the same for all subsequent models. In
addition, the standardized indirect of perceived similarity on sign-up likelihood via community is also significant, (b=.15, p=.005, 95% CI [.08, .25]).

Table 5. Mean Values and Standard Deviations by Similarity and Number of Avatars, Study 3

<table>
<thead>
<tr>
<th>DV</th>
<th>Similarity</th>
<th>One Avatar</th>
<th>Multiple Avatars</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Mean</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td></td>
<td>SD</td>
<td>SD</td>
<td>SD</td>
</tr>
<tr>
<td>Perceived Similarity</td>
<td>Similar</td>
<td>4.71 (.94)</td>
<td>4.62 (1.14)</td>
<td>4.66 (1.04)</td>
</tr>
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Higher values indicate increased levels of each dependent variable
H8b was also supported. The standardized indirect influence of perceived similarity on sign-up likelihood via community is also significant, ($b=0.14$, $p=0.004$, 95% CI [.07, .25]). The direct effect of community on recommendation likelihood is also significant, $\beta=0.48$, $t(197)= 7.661$, $p<0.001$. The relationships are shown in Figure 8.
Support was also found for both of the predicted relationships in Hypotheses 9a and 9b. For one’s own expected level of care (H9a), the standardized indirect effect of perceived similarity via community is significant, ($b=.10, p=.006, 95\% \text{ CI } [.05, .16]$). The direct effect of community on one’s own expected level of care is also significant, $\beta=.33$, $t(197)= 4.723, p<0.001$. For expectations regarding others’ level of care, there is a direct effect from sense of community, $\beta=.44$, $t(197)= 6.948, p<0.001$. The standardized indirect effect of perceived similarity via community on others’ level of care is significant as well, $b=.10=.3, p=.006, 95\% \text{ CI } [.06, .23]$, indicating support for H9b. The full models for each are shown in Figures 9 and 10.

Figure 9. Model for Expectations of Own Level of Care, Study 3
A means test was used to analyze H10. Support was found, $F(1, 200)= 5.240, p=.023$. When participants viewed multiple avatars that showed other users who were similar on the dimensions of age and sex, greater concerns that the product would not be available when it was needed were indicated.

**Discussion**

In this study, the outcomes related to perceived similarity continue to demonstrate the importance of this construct. When biological information in the form of an avatar was presented indicating similarity on age and sex, participants in turn perceived more similarity with the prior user. The avatar information itself did not have a direct effect on measured dependent outcomes but instead influenced through perceptions of similarity. It appears that it is not just the act of seeing the information that is impactful; rather it is
processing the information from the avatar image to assess similarity which leads to effects. Increased perceptions of similarity lead to increased feelings of community.

Sense of community also continues to be highly influential on desirable outcomes. Sense of community partly explains the relationship between perceived similarity and sign-up likelihood and recommendation likelihood, as well as participants’ intentions to care for a rental product and their expectation of care by other users. All of these findings are meaningful. Even though thoughts regarding community are explicitly measured, sign-up and recommendation likelihood are proxy measures of commitment that further support the idea that community can exist when products are rented not owned. These findings are consistent with the literature on markers of community when products are owned (Muniz Jr. and O’Guinn). Sign-up likelihood and recommendation likelihood can be alternately viewed as commitment and evangelizing, respectively. Evidence of community in the current empirical work is contrary to Bardhi and Eckhardt’s observation of no existence of community in their research on short-term car rentals. That Study 3 had opposite results from Bardhi and Eckhardt’s qualitative research on community in a rental context further supports the idea that having knowledge about other users can be a powerful tool in creating community.

Participants’ willingness to demonstrate care for a product when they sense they are part of a community is also noteworthy. Sense of community positively influenced both participant’s own level of care towards the rental product as well as expectations of other users’ care. A common concern with rentals is that because products are communal, no one individual experiences the need to demonstrate care. Getting people to demonstrate care for a product they do not own has proved challenging, as evidenced by
research on the tragedy of the commons. It appears that community does aid in getting people to care, as suggested by Hardin (1968). Hardin’s research was on public goods but the findings of Study 3 expand the context beyond public good to other goods that are used communally via rentals and not owned. Everyone collectively benefits when care is given but often no individual responsibility is assumed. Having greater expectations of others also serves as a marker of the shared moral consciousness of communities where all members are expected to contribute.

Clearly, these results suggest that companies should employ all possible means to increase feelings of community among members, as everyone benefits from the outcomes positively associated with community. All of these outcomes are desirable from the viewpoint of the rental company. If users are actually similar on biological characteristics, companies should employ methods, such as avatars, to communicate similarity among their user base.

Finally, the number of avatars viewed by participants did not have the predicted impact on sense of community or disgust. Viewing multiple avatars (vs. an individual avatar) of the prior user did not lead to increased feelings of disgust. It was expected that viewing multiple avatar images made salient the fact that a number of people use the same rental product and would in turn heighten concerns with contagion. Having participants view multiple avatar images of prior users that were similar on biological characteristics also did not lead to a greater sense of community as predicted. Having information about multiple users should have served as an indicator that many of the other users were similar to the participant. The literature suggests that people perceive similarities on biological characteristics as indicative of similarities in background,
experiences and values. Communities typically form around shared commonalities. It is somewhat surprising then that sense of community was not greater when participants knew that multiple other users were similar.

It appears that showing avatar images of multiple prior users was fairly inconsequential to evaluations. The only instance when viewing multiple images was impactful was in regard to scarcity concerns and those effects were not positive. When multiple avatars of prior users that were similar on biological characteristics were viewed, scarcity concerns were greater. Showing multiple avatar images does not appear to have an upside for the rental company but there is a potential downside in that viewing multiple images can trigger scarcity concerns.

GENERAL DISCUSSION

Taken in conjunction, Essay 3 shows that there are ways to both detract from and enhance feelings of community. In Study 1, not having a completed avatar image is one way to signal apathetic participation to other users and one’s desire not to engage with other members of the rental service. It communicates that one simply wants to use the product without connection or obligation to other users. Viewing a completed avatar image made participants feel a greater sense of community. There was also an indirect effect of the completed avatar image on sign-up likelihood and recommendation likelihood via sense of community. These findings underscore the positive effects that emerge when users feel as though they belong to a community.
Study 2 demonstrated the influence of similarity on biological traits among users and its relation to community and disgust. As predicted, participants indicated a greater sense of community when they perceived more similarity among users. This aligns with past literature suggesting people perceive similarity on other traits when they observe similarity on biological traits. Participants also felt less disgust when they viewed an avatar image similar in age and sex. Whether consciously or unconsciously, it appears there is a bias where people prefer similarity and use that information to make subsequent affective judgments.

In Study 3, information about multiple prior users is included to determine its effect on feelings of community. There was no difference in perceptions of community, even when comparing multiple similar images to multiple dissimilar images, which is surprising. Viewing multiple avatars compared to an individual avatar also did not lead to greater feelings of disgust, but it did lead to an increase in concern with scarcity when the multiple users were similar on biological characteristics. Based on these findings, it does not appear that benefits emerge when companies show multiple images of prior users rather than just the prior user. Study 3 also explored intended behavioral outcomes as a result of community. Avatar images of the prior user are used to infer perceived similarity. When images are perceived as more similar, there was an increase in sense of community and an indirect positive influence on outcomes such as sign-up likelihood, recommendation likelihood, general care of the products and expectations of other users’ level of care. These findings extend past research on communities and demonstrate that a sense of community as well as markers such as evangelizing and shared moral consciousness can exist even when products are rented not owned.
Collectively, it appears that there are many benefits that emerge if companies can build a sense of community among their users. The research conducted in these three studies does not find drawbacks associated with trying to create a sense of community and shows that demonstrating similarity among users is one avenue to achieve this goal. One way to detract from creation of community is allowing users to communicate their apathetic participation to each other. Companies can attempt to prevent this by requiring all users to complete their profiles or avatar images before product usage or reservations commence. Thus, even if a user does not want to engage in community building aspects of the rental service their intentions are not visible to other users.
CHAPTER IV
GENERAL DISCUSSION

Collectively, these essays demonstrate the integral role the social element plays in access-based consumption. Bardhi and Eckhardt (2012) did not fully capture this element in their proposed dimensions. Rather it was just alluded to in the descriptions of the dimensions of anonymity and consumer involvement. By incorporating the social element into each of the dimensions proposed in Essay 1, a more complete conceptualization of access-based consumption can occur.

Foremost, it is recommended that access-based consumption be studied on the basis of its two individual components: renting and sharing. This delineation more closely aligns with prior work in marketing and also allows the nuances associated with each type of consumption to emerge. Rather than look at the motivation of the product owner in engaging in exchange as profit or not-for-profit as Bardhi and Eckhardt propose with their market mediation dimension, Essay 1 suggests that the actual exchange serve as the determining factor for categorization as renting or sharing. If money is exchanged, the exchange is categorized as renting and if money is absent, it is categorized as sharing.

Looking at the exchange also sets certain expectations for the other proposed dimensions. Sharing is often moored in social bonds which can influence behavior. Renting is anchored to transactional exchanges that also influence behaviors but in ways that differ from sharing. On the remaining proposed dimensions of anonymity, temporality, consumer participation, type of accessed object, political consumerism and governance,
differences can be expected based on whether the exchange is grounded in social bonds or monetary exchange.

In addition to reconceptualized dimensions, Essay 1 examined four key outcome variables associated with renting and sharing: sense of community, cooperation, loneliness and concerns with contagion. These variables are essential to consider if more people are going to opt to rent or share rather than own. One of the key concerns with accessing products rather than owning them is whether the product will be in good condition or if it will be unclean, a concern directly stemming from contagion. When an item is owned, people can engage in rituals to ensure cleanliness and maintain standards of care. When an item is not owned, there must be a certain degree of trust that others will maintain cleanliness and care. This trust is particularly challenging to obtain when the other users of a product are interpersonally anonymous and there are no intermediaries present. One mechanism for achieving care and potentially mitigating concerns with contagion is through the creation of community. Communities often possess a shared moral consciousness suggesting an obligation to other members to uphold the norms of the community and to cooperate with other members, acting out of group-interest over self-interest. Sense of community could also help address recent upswings in emotional loneliness experienced in individualistic societies such as the United States. Rather than surrounding one’s self with individually owned items, people can meet and bond with others through usage of communally owned products. In Essay 2, the outcomes associated with sense of community and concerns with contagion are empirically tested.
Overall, the results of seven studies bring substantial understanding to what influences attitudes and behaviors in a rental context. Findings consistently indicate that imagining encountering the prior user negatively influenced evaluations, regardless of other manipulations. Specifically, in three studies, encounter with the prior user negatively influenced satisfaction and attitude towards the rental company and enhanced feelings of disgust. Measuring affective responses are important as affect tends to influence future behavior. The formation of greater feelings of disgust on account of the encounter also had an indirect negative influence on satisfaction and attitude towards the rental service. Clearly imagining encountering the prior user is not associated with any positive outcomes, at least in regard to variables measured in these studies.

Five of the studies in the current research also took the provision of online information about the prior user into account. Rental companies have the opportunity to utilize both online and offline mechanisms to communicate information about other users given that it is mixed-modality. Foremost, findings from the studies indicate that participants do incorporate online information about other users in their evaluations of the rental experience. When online information about a prior user’s name, age, sex and race was provided (vs. absent or incomplete), consumers experienced a greater sense of community. When considering the findings in light of the theory of social distance, the results align with the literature. The primary way to decrease distance between users of a rental service is to reduce interpersonal anonymity among users. In addition, if that online information communicated similarity on the biological characteristics of age, sex and race between the participant and the prior user, sense of community was enhanced. The benefits that arise from sense of community should not be discounted. When participants
felt a greater sense of community, they indicated a higher likelihood of signing-up for the rental service and recommending it to others. Both of these are desirable outcomes from the company’s perspective. In addition, later studies provide evidence that feelings of community, emerging from perceived similarity on biological characteristics to other users, were related to care of the rental product. Expressly, participants indicated intentions to engage in greater levels of product care and had increased expectations of other’s care. As suggested by the literature on the tragedy of the commons, sense of community does seem to overcome concerns related to care of communal products. Care of rental products is of concern to rental companies. If users do not demonstrate care, future users’ experiences could be negatively impacted and could lead to users exploring alternatives to renting, such as purchase, to meet their consumption needs.

Finally, viewing multiple images of the prior user does not increase occurrence of desirable outcomes. The results suggest that providing information solely about the prior user is sufficient for participants to make judgments. Multiple images of prior users did not contribute to greater feelings of disgust but it also did not increase feelings of community. However, when multiple images of similar others were viewed there was a greater concern that the product would not be available when needed. Companies should consider whether the inclusion of multiple images of users will be beneficial before making including on the rental website.

In conclusion, the findings from the current research are important in both theory and practice. The contribution to theory building is extending research on the influence of other customers, similarity, sense of community and concerns with contagion to the rental context. With renting, particularly when intermediaries are not present, customers must
engage in extra-role behaviors. The literature suggests that people are more likely to engage in these behaviors when they are not socially distant from others, as measured in our studies by sense of community. The studies demonstrate ways that companies can communicate information about other users in ways that do not violate privacy yet still boost feelings of community. Information about other users is particularly impactful when it suggests similarity on biological characteristics among users as participants interpret similarity on these characteristics as similarity on other characteristics.

LIMITATIONS AND FUTURE RESEARCH OPPORTUNITIES

There are limitations inherent to any research that uses lab experiments. Each study used imagination of a scenario rather than placing participants in the actual rental car setting. The lab setting allows for control of many variables at the expense of measuring behavior in the scenario one would be exposed to in real life. Given the robust findings related to disgust emotions, it is likely that feelings of disgust emerging from an encounter with the prior users would continue to exert influence both directly and indirectly. Conducting field experiments with conditions similar to ones described in studies in studies 1a and 1b would add could add ecological validity to the current research.

In addition, all participants were instructed that they had a free trial offer for the rental product. If participants were actually required to pay money to use the product, the influence of encounters with another user and information about others in the rental community may differ. It is likely the effects found in the current research would only be
further enhanced. If evaluations are influenced simply by imagining one’s self in the situation and there is no money required to take advantage of the free trial offer, actually being in the situation and exchanging money for use should lead to stronger expression of all attitudes, feelings and emotions. The impact of paying money could also be tested in a lab study through variation of the amount participants expect to pay for a set amount of time with the rental product and then measuring the outcomes on the dependent variables of interest.

Another potential limitation is that only positive images were depicted with the avatars. The literature suggests that stereotypes for people who rent are fairly negative. Rather than confirming these negative stereotypes, the images used in the current research were positive and likely contradictory to what most people may imagine when asked to envision the prior user. Participants were not asked to describe the person they imagined encountering. Adding this type of qualitative response could aid in understanding who people imagine when asked to imagine people that rent. Given the emergence of access-based consumption companies since 2008, stereotypes of those who rent may be shifting from that of feckless consumers who are financial failures to those of savvy consumers who are financially responsible and value experience over material possessions. It would be enlightening to explore how participants react to either an online image or offline encounter when the prior user is described in a disparaging manner or depicted as engaging in clear violations of social norms, such as emerging from the rental car with a lit cigarette.

The final limitation regards the participants used in the studies. First, none of the respondents were current users of a service similar to Zipcar or B-Cycle. Although some
participants indicated experience with traditional car or bike rentals, such as from the airport when on vacation, none had tried short-term rentals where intermediaries between users are absent and the intention is that using the service negates the need for ownership of the rental product. Usage of this type of rental service is growing, but it is still not mainstream. Conducting research with current users of these types of services would be beneficial. As comfort and experience with a service grows, differential responses to encounters with the prior user or having information about other users may emerge. Differential responses could be expected because users would have more than one exposure to the rental company whereas in our research the scenarios depict the first exposure to this type of rental service. Also related to characteristics of the population, for Studies 2 and 3 in Essay 3, only data from Caucasian participants was analyzed. This was due to a desire to match characteristics deemed important to the population in a pretest, age and sex, and does not reflect any prejudicial actions on behalf of the researchers. Although differences based on ethnicity are not predicted, conducting similar research with different ethnic populations could confirm or disconfirm this supposition.

There are many opportunities for future research that emerge. First, this research could include a field study to see if there are differences in imagined encounter vs. an actual encounter with the prior user. Second, research could be conducted with current users of the rental services to determine if differences exist between first time users and more experienced users. Concerns with contagion might be diminished if a person uses the same product repeatedly, has numerous encounters with other users or establishes relationships with other members of the rental service. Exploration of stereotypes associated with people who rent would also be beneficial. The literature suggests
pervasive negative stereotypes exist and that renting is viewed primarily as an opportunity for those who cannot afford to own. Given the number of companies emerging in the rental domain and shifting views about ownership, particularly among Generation Y and Millennials, it would be fruitful to understand if these stereotypes persist or if renting is now viewed as trendy or financially savvy. In addition, loneliness was not examined in the empirical research although it is proposed as an outcome associated with access-based consumption. Qualitative or longitudinal research in a specific rental context could address this gap. Also, the empirical research used only two rental contexts: bikes and cars. More research is needed to understand how findings may vary given the context and whether certain variables such as contagion or community are more influential in certain situations. The rental domain is highly under-researched and provides many future opportunities of exploration for companies, practitioners and academic researchers.

MANAGERIAL IMPLICATIONS

Collectively, the findings from these studies offer a number of managerial implications. First, is the suggestion not to physically locate rental products in close proximity. Alternatively, companies could institute a buffer time period between rentals so that users do not encounter other users of the rental product. The robust findings for disgust emotions when viewing another person use the product are challenging to overcome in the rental context and distance, either in regard to proximity or temporal spacing could help prevent negative evaluations from occurring.
Additionally, if the user base of these short-term rental companies is similar on biological characteristics, companies should find ways to communicate this to its users. Avatars are one way to convey information. There benefit is two-fold. First, these types of short-term rentals are mixed mode with both online and offline components. Companies can take advantage of the online component by requiring users to complete avatars to serve as identifiers as they navigate the website. Second, avatars are ideal for communicating biological characteristics about the person it is intended to represent. Companies can limit customization of the avatar to only specific attributes such as age, sex, race and name of the user with variation to represent any individual’s combination of these attributes. If companies do choose to employ the use of avatars, they need to take into account certain considerations. Foremost, companies need to require completion of avatar images before allowing users to use their avatar on the website. Leaving the image blank or just inputting the bare minimum detracts from the sense of community that companies are trying to build.

Having information about other users, in the form of a completed avatar, influences perceptions of similarity. Perceptions of similarity positively influence feelings of community among users. As suggested in the literature and confirmed in the findings of the current research, experiencing a greater sense of community can result in many positive outcomes. Outcomes that a company may be most interested in are word-of-mouth referrals and intended care of the product. When intermediaries are not used, companies are dependent on other consumers to take on extra-role behaviors such as caring for the product. If products are not cared for, other users experiences are negatively influenced. Given that the idea of short-term product rental as an alternative to
ownership is still in the early adoption phase in the United States, rental companies need their users to talk to others about their experiences, preferably in a favorable light. Hearing that other people have enjoyed their short-term rental experience may aid in reducing the risk associated with engaging in different form of consumption. Results from the current research also suggest that companies only need to provide data about the prior user rather than multiple prior users to achieve perceptions of similarity and feelings of community. Providing information about only the prior user should also be helpful to companies who may have a more heterogeneous consumer base as consumers may infer greater homogeneity if only the prior (similar) user is viewed. Companies should incorporate findings from the current research when considering optimal structuring for their rental services, particularly in regard to the provision of information indicating similarity on biological characteristics about other users.
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