## RESEARCH ARTICLE



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# Metaphysical deterrents to providers' participation in the sharing economy: The role of peer-to-peer contagion

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# **Abstract**

Despite the rising popularity of peer-to-peer sharing platforms, very little empirical research has documented how consumers respond to the opportunity of renting goods to one another. This work delineates how metaphysical (besides physical) contagion beliefs, particularly when self-identification with possessions is high, demotivates people from renting out their possessions in P2P platforms. We claim and empirically test that (1) others' physical contact hinders willingness to share a possession due to an anticipated threat to its essence and that (2) the possession's emotional link with the owner's identity amplifies this effect. Online and laboratory experiments provide evidence for these effects in isolation from physical contamination concerns. This research extends the research on peer-to-peer sharing by demonstrating detrimental effects of beliefs in essence threat and a possible mitigation tactic.

## KEYWORDS

contagion, essence, magical thinking, possession-self link, sharing economy

# 1 | INTRODUCTION

Even though service-based peer-to-peer sharing platforms (e.g., Uber, Fiverr, TaskRabbit) are rapidly expanding their market presence across the globe, goods-sharing platforms (e.g., Peerby, Spinlister, Getaround) seem to be inherently more niche and only prevalent in fewer locations. A plausible reason for this gap is a shortage of individuals' product supply since matching supply and demand is fundamental for a peer-to-peer (P2P) marketplace to succeed (Kumar et al., 2018).

P2P marketplaces provide a space where individuals interact with each other by taking the position of a seller, a buyer, or both simultaneously. This P2P interaction model challenges the dominant logics of the conventional market economy by connecting individuals with those beyond their circle of personal connections (family, friends, neighbors, etc.) and by creating an opportunity for them to

make money through their belongings or labor. Consequently, studying the factors that (de)motivate individuals to provide goods and services to each other is one of the most interesting avenues to advance our understanding of this phenomenon.

The current work adopts a behavioral perspective to investigate individual-level roadblocks on the supply side, which may be hindering the growth of peer-to-peer good-sharing activities. Prior research uncovered a variety of barriers to partaking in the sharing economy such as lack of trust, effort requirement, inflexibility, privacy concerns, and undesired social interaction (Spindeldreher et al., 2019). The purpose of our investigation is to study a relevant yet unrevealed factor that we propose is prominently in play when privately owned goods are shared: peer-to-peer contagion.

Existing research has studied the decision-making processes of sharing users extensively, but it has paid little attention to the

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In an initial exploratory study, we validated that the contamination of a possession's essence is a substantial factor informing individuals' willingness to share possessions. Then, four experimental studies provide evidence for the hypothesized effects of contagion concerns and determine boundary conditions. Overall, these findings advance our knowledge of what influences individuals' decision to open their belongings to the use of others, thus contributing to the study and practice of motivating participation in the sharing economy.

# 2 | CONCEPTUAL BACKGROUND

Acknowledging there are many different configurations of the sharing economy, this research addresses exclusively the sharing of consumer-owned resources. This leaves out collaborative consumption of company-owned resources (e.g., coworking, city bike sharing, Zipcar) but includes peer-to-peer interactions, in which an individual is the provider of a good for another individual. Furthermore, we study transactions with monetary compensation exclusively, leaving out borrowing, swapping, and donation-related activities. The segment of the sharing economy under scrutiny here grants individuals an opportunity to become micro-entrepreneurs who make money from their belongings (Akbar & Hoffmann, 2022). Finally, we study an access-based form of sharing where the ownership is not transferred from the provider to the buyer, opposite to what would take place in a second-hand market (e.g., eBay, Facebook Marketplace, Vinted). Therefore, the scope of our research is peer-to-peer and monetary rental of goods, which is enabled by profit-oriented digital platforms (e.g., GetAround, Turo, Airbnb, Spinlister, Peerby).

# 2.1 | The law of contagion and consumer contamination theory

Renting out an item involves opening a possession to the presence of others—thus, to contagion. The law of contagion, in its initial conceptualization, suggests that a person or an object can transfer its physical properties to (i.e., contaminate) another item through touch (Nemeroff & Rozin, 1994). For example, a sportsman leaves stains of sweat on his clothes, or a lemon leaves its smell on hands. After this preliminary establishment of contagion law on the basis of transferred physical entities (i.e., germs, odor, and dirt), the concept of contagion was later expanded to involve the transfer of nonphysical

or metaphysical entities (i.e., essence, soul, mood) (Nemeroff & Rozin, 1994).

An emerging body of research has been investigating how this phenomenon applies to consumer decisions. In this context, laboratory and field experiments have shown that consumers behave in compliance with the principles of both physical and metaphysical contagion. According to the former, shoppers avoid products that other shoppers (seem to have) touched and find these products disgusting (Argo et al., 2006; Castro et al., 2013; Morales & Fitzsimons, 2007; White et al., 2016). However, in the case of metaphysical contagion, consumers have been shown to devalue products when their creator is found to be immoral (Stavrova et al., 2016). Thus, consumers expect products that are used, designed, or touched by others to carry some physical (e.g., germs, stains) but also nonphysical properties (e.g., personal energy, dexterity) from these previous contacts, which may also transfer to themselves (Huang et al., 2017).

Our conceptualization of peer-to-peer contagion is rooted in the fact that when sharing a possession with strangers, the owner has to subject the item to the probability of contagion. During the rental period, a variety of unknown sources (i.e., rental users, places they have been, other objects they used along the way) come in contact and possibly transmit both physical and metaphysical properties to the rental item (Nemeroff & Rozin, 2018). Therefore, we argue that the lack of certainty regarding how such contacts will impact the object by the time it is returned to the owner discourages potential providers from sharing.

**H1.** Consumers will be less (vs. more) willing to share their possessions when they expect a higher (vs. lower) extent of physical contact.

Furthermore, saliency of other users' contact with a shared object has been shown to activate physical contamination concerns, and the beliefs about the transfer of germs or toxic residue have been shown to arouse disgust and decrease intentions to use access-based services (e.g., car rental by a car-sharing company) (Hazée et al., 2019). We argue that, even if the item is returned in the same physical condition (i.e., thoroughly cleaned, undamaged), owners might anticipate a change in the essence of the item after being rented out. We hypothesize that this anticipated essence threat mediates the deterring effect of physical contact on sharing intentions, and that it is distinct from the effect of physical contamination. Because recent empirical work has demonstrated that beliefs about physical and nonphysical contagion transmission both overlap and are distinct (Huang et al., 2017).

**H2.** The extent of physical contact reduces willingness to share due to essence threat, even controlling for physical contamination concerns.

An important boundary condition for physical contact to constitute an essence threat is rooted in the fact that the owner is to receive their possession back. That is, if a provider rents an item, even though they remain being the owner of the item, a temporary

use of others is enough to change the essence of the item—without any visible physical change. However, if a provider sells an item instead of renting it, the possession's ownership is permanently transferred, and the product is not returned to the original owner. This context inherently renders essence threat ineffective since the object will not be returned to them again. Therefore, we argue that essence-related concerns should take place only when the type of transaction is temporary renting (e.g., P2P sharing) but not full ownership transfer (e.g., second-hand purchases).

**H3.** The extent of physical contact reduces willingness to share due to essence threat, only when the providers expect the possession to come back to them.

Figure 1 depicts our conceptual model, hypotheses, and studies testing them (See Web Appendix 1 for a summary table).

#### 3 | EMPIRICAL SUPPORT

# 3.1 | Summary of studies

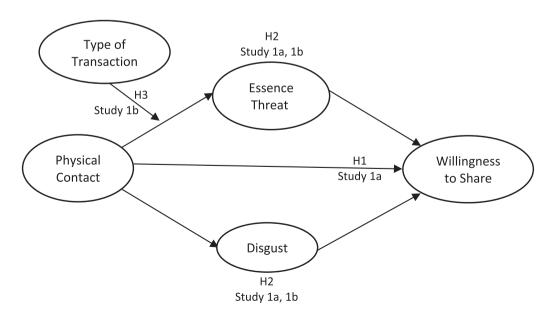
In an initial exploratory study, 104 Prolific workers answered a survey that tested the significance of a set of sharing-related concerns. We validated the significance of our proposed determinant of willingness to share (WTS), threat to a possession's essence, alongside six other prominent factors that the previous literature identified (i.e., mental effort, physical effort, scam by other users, communication with the other users, lack of hygiene, damage or unfair wear and tear). The survey introduction stated that "there are online platforms that facilitate the sharing of various types of goods between individuals" and "in such platforms, for example, a user can rent a costume or a car from another user over a weekend in exchange for money." Then participants were

asked to imagine themselves considering renting out one of their possessions through a sharing platform. An open-ended question asked them to list and explain three points that would make them hesitate to partake in such sharing platforms. Then participants read brief descriptions of the above-mentioned concerns and indicated the likelihood that they would be concerned by each of them (see Appendix 2a for the material). Hygiene- and essence-related concerns (M = 5.76, SD = 1.33; and M = 5.10. SD = 1.61 respectively) were rated to be important significantly above the mean on a 7-point Likert scale (t(99) = 13.65, p < 0.001, and t(99) = 6.70, p < 0.001 respectively) (Appendix 2b). Appendix 2c includes a summary of descriptive statistics.

Once essence-related concerns had been validated, three online studies and a laboratory experiment tested our hypotheses. Study 1a and 1b provide evidence for the proposed mediation model where anticipation of essence threat explains the effect of physical contact on willingness to share, above and beyond the activation of physical contamination concerns (operationalized as feeling of disgust). These studies use different operationalizations of physical contact: Study 1a uses intimacy of physical contact and Study 1b uses length of contact time. Besides these, Study 1b also tests the boundary condition of transaction type. Study 2 and 3 tests two intervening conditions for the above-mentioned effects. Study 2 demonstrates that the strength of the possession-self link amplifies the effect of essence threat on willingness to share. Study 3 shows that making sterilizing options more salient mitigates anticipation of essence threat.

# 4 | STUDY 1A-TESTING THE BASIC MODEL

An important dimension of physical contact with an object is physical intimacy: the extent it is used in close contact with the body (Rozin & Fallon, 1987). Disgust and contamination concerns are greater when



contact becomes more intimate (i.e., near vicinity, contact with skin, ingestion) (Angyal, 1941; Dehling & Vernette, 2020). Based on this rationale, we propose that the extent to which an object is used in intimate contact (e.g., close touch) with the body affects how much the owner is concerned about essence contamination in renting it. Thus, this study uses intimacy of contact as a proxy for our independent variable, physical contact, and it manipulates contact intimacy by altering the level of close body contact the shared object requires in use.

For this study, we chose costume as the focal product for two reasons. First, costume sharing is a highly relevant context as clothing is one of the major spending categories and clothes are increasingly circulating between individuals (e.g., rental, donation, secondhand market) (Styvén & Mariani, 2020). Second, consumers shopping secondhand have shown stronger contagion concerns and respond more negatively to a product's prolonged prior contact with someone else's body, particularly in cases involving a high level of bodily closeness (Bezançon et al., 2019).

We also proposed, in H3, that only when the object comes back to the owner, contact intimacy can affect willingness to share by activating essence-related concerns. In testing these hypotheses together, we use a two-by-two between-subjects design where both how close to the body is the product during use (contact intimacy in use: low or high) and the type of transaction (rental or sale) is manipulated. Additionally, we control for the effect of monetary expectations by introducing a constant price across experimental conditions as one could expect more revenue from selling than renting. Finally, we also measure beliefs in the transfer of metaphysical properties as such dispositional differences could also affect our proposed model.

# 4.1 | Procedure

We start the study by asking participants to imagine themselves as owners of a warrior costume that is composed of some clothing (i.e., dress, shorts, t-shirt) and some tools (i.e., sword and shield) and show participants a picture of one such costume element according to their gender (see Appendix 3 for the study material). We then asked them to consider (1) either renting or selling this costume of theirs and (2) either only tools or only clothes in response to a request from a user who offered 15 euros for this transaction. Following, a single question ("In the situation described, how likely are you to rent out (sell) the costume") measured the dependent variable on a 7-point Likert scale from "very unlikely" to "very likely". Participants were then provided a definition of essence as "the intrinsic and invisible nature of something that determines its true character," and indicated their anticipated essence threat (e.g., "After being used by others, the essence of my costume will be tainted.").

To measure physical contagion concerns, we adopted the 4-item feeling of disgust scale used by Morales and Fitzsimons (2007) in operationalizing this construct (e.g., "After being used by others, the car will feel disgusting."). To measure individual differences in

metaphysical contagion beliefs we used the spiritual contagion sensitivity scale developed by Kim et al. (2023). These and other scales used in future studies are listed in Appendix 4. The survey closed with an open-ended question that asked students to write, in their own words, their definition of what essence is in this context. This question was oriented to test if their understanding of the concept was adequate and consistent (see Appendix 5 for a selection of responses).

# 4.2 | Data

One hundred forty-eight undergraduate students (45% Female,  $M_{\rm age}$  = 19.5) participated online in exchange for course credits. We created mean scores for the 4-item disgust scale and the 6-item measuring anticipated essence threat, after testing scale reliabilities (Cronbach's alpha values were 0.95, 0.89 correspondingly).

## 4.3 | Manipulation check

In line with the planned manipulation, participants in the clothes-only (high physical intimacy) condition scored higher on the manipulation check item (i.e., "To what extent would you worry about wearing the cloth (the sword and the shield) in this costume if someone else wore it?") than those in the tools-only (low physical intimacy) condition ( $M_{cloth}$ =3.64, SD = 1.69,  $M_{tools}$  = 2.12, SD = 1.60, t(146) = 5.598, p = <0.001).

# 4.4 Results

In support of H1, data show direct negative effect of physical intimacy on WTS ( $M_{cloths}$  = 4.61,  $SD_{cloths}$  = 1.91,  $M_{tools}$  = 5.63,  $SD_{tools}$  = 1.58, F(1,144) = -3.496, p < 0.001). The direct effect of physical intimacy on essence threat is not significant ( $M_{cloths}$ =3.25,  $M_{tools}$  = 3.00, p = 0.32). The direct effect of physical intimacy on disgust is marginally significant ( $M_{cloths}$ =3.51,  $M_{tools}$  = 3.00, p = 0.08).

A 2 (physical intimacy: low vs. high) by 2 (transaction: rent or sell) ANOVA revealed a significant interaction effect on essence threat (F (1,147) = 6.315, p = 0.013,  $\eta_p^2$  = 0.042). Pairwise comparisons revealed that only in the renting scenario, essence threat is higher for renting cloths than tools ( $M_{cloths}$  = 3.11, SD = 0.22,  $M_{tools}$  = 2.28, SD = 0.24, F(1,74) = 5.555, p = 0.02,  $\eta_p^2$  = 0.07). However, in the selling scenario, the effect of physical intimacy on essence threat is insignificant ( $M_{cloths}$  = 3.40, SD = 0.22,  $M_{tools}$  = 3.73, SD = 0.24, F(1,72) = 1.246, p = 0.27). Thus, others' touch causes an anticipation of essence threat only when the item is rented.

We test a mediation model with two parallel mediators via PROCESS model 4 (Hayes, 2018). Bootstrapping analysis with 5000 samples supports a mediation pattern in which essence threat mediates the negative effect of touch on WTS in the condition of renting ( $\beta$  = 0.2483, SE = 0.17, 95% CI: 0.0005-0.6496) but not in the

afternoon or 1 week. Following, a single question measured the dependent variable on a 7-point Likert scale (In the given scenario, how likely are you to rent out the car?). Essence threat and disgust were measured as in Study 1a.

condition of selling ( $\beta$  = -0.1001, SE = 0.10, 95% CI: -3304 to 0.0856). Moreover, disgust does not predict WTS in either sell or rent conditions; thus, it does not mediate the effect of touch on WTS. The effect of metaphysical contagion expectations remains significant even after including disgust as a parallel mediator. The control variable, beliefs in spiritual contagion did not correlate with WTS and there was no interaction effect between this control variable and the contact intimacy on WTS.

Additionally, we measured two other variables for control purposes. The first was the degree to which participants found this rental request financially motivating (e.g., "How much monetary benefit do you find in this rental transaction?") as longer rental time could mean more revenue. The second control measure was the spiritual contagion scale as in Study 1a.

Therefore, Study 1a provides evidence that there is a significant negative relationship between increased physical contact and WTS (H1), which seems to be driven by essence-related concerns (H2) and conditional to the return of the product (H3). It also controls for monetary expectations, which could be an alternative explanation. The next study tests the mediation model with a different focal product.

#### 5.2 | Data

# 5 | STUDY 1B-REPLICATION WITH DIFFERENT PRODUCT CATEGORY

We calculated mean scores for the constructs with indicated Cronbach alpha values: 4-item disgust scale (0.95) and 6-item measuring anticipated essence threat (0.93). Descriptive statistics of all variables for this and the other studies are listed in Appendix 7. Two hundred thirty-five responses (59% Female,  $M_{\rm age}$  = 43) were collected from Prolific users who indicated to be car owners. Nine responses were excluded due to failing the attention check ("How long was the rental request for?": 1 week or one afternoon).

In this study, we replicate the test of our theory: others' physical contact is detrimental to consumers' willingness to share their possessions (H1). We also replicate our proposed process that the anticipation of essence threat mediates this effect and that the effect of essence-related concerns exists over and above physical contagion concerns (H2). For this study, we chose a family car as the focal product for two reasons. First, peer-to-peer car sharing is a common practice facilitated by various local and global platforms (e.g., Hiyacar, Getaround, Turo, Car Next Door). Second, using a different product category would increase the generalizability of Study 1a's findings.

# 5.3 | Manipulation check

This time, we operationalize the extent of physical contact by lengthening the others' contact time. Previous research has shown that other shoppers' physical touch makes a product less attractive, especially when they are expected to have interacted with the product for a longer time (Bezançon et al., 2019; Castro et al., 2013). We proposed that the length of the rental period affects the degree an owner is concerned about contagion in a renting incident. Because as the time window for rental lengthens, one would expect more incidences of physical contact to happen between the renter and the rented item.

In line with the planned manipulation, participants in the long rental term condition scored higher on the manipulation check item (i.e., "How much would you be bothered by a stranger's physical contact with the car if they rented it for 1 week/one afternoon?") than those in the short rental term condition ( $M_{short}$ =2.87,  $M_{long}$  = 3.31, one-sided t(224) = -1.980, p = 0.02).

# 5.1 | Procedure

# 5.4 | Results

The experiment had a one-factor (rental period length) two-level (short vs. prolonged) between-subjects design with random allocation. This study was run with paid participants on Prolific, an online participant recruitment platform. Similarly to Study 1a, we introduced participants to a car sharing scenario and asked them to imagine themselves considering posting the second car of their household on a popular sharing platform to rent it out occasionally (stimuli presented in Appendix 6). Then we presented the rental time manipulation by alternating the time a user requests to rent their car for one

The direct effect of rental period on essence threat was significant ( $M_{short} = 2.71$ ,  $M_{long} = 3.14$ , one-tailed t(224) = -2.065, p = 0.02) but its direct effect on WTS was not ( $M_{short} = 5.17$ ,  $M_{long} = 5.02$ , one-tailed t(224) = 0.714, p = 0.24). The absence of this direct effect (H1) could be due to participants' increased monetary expectations which was positively correlated with WTS (r(224) = 0.465, p < 0.001) and caused by lengthening the rental period ( $M_{short} = 4.76$ ,  $M_{long} = 5.12$ , one-tailed t(224) = -2.070, p = 0.02). Therefore, we control for this variable in testing the proposed mediation model with two parallel mediators via PROCESS model 4 (Hayes, 2018). Results support that anticipating essence threat mediates the negative effect of increased contact on WTS (bootstrapping analysis with 5000 samples:  $\beta = -0.14$ , SE = 0.08, 95% CI: -3231 to -0.0118).

On the other hand, rental period did not have a significant effect on anticipated disgust ( $M_{afternoon}$  = 2.35,  $M_{week}$  = 2.57, one-tailed t(224) = -1.120, p = 0.13) and disgust does not show a significant mediation effect (bootstrapping analysis with 5000 samples:  $\beta$  = -0.09, SE = 0.05,

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95% CI: -0.1458 to 0.0240). Beliefs in spiritual contagion did not correlate with WTS and there was no interaction effect between this control variable and the rental time variable on WTS.

Therefore, Study 1b provides evidence supporting H2 that increased contact intimacy diminishes WTS due to essence-related concerns, whereas disgust does not account for the process between contact intimacy and WTS. Results also support that this mechanism is distinct from physical contagion concerns (disgust). Our next study investigates whether the strength of the consumer's possession-self link may augment the effect of potential essence threat on a consumer's willingness to share.

# 6 | STUDY 2-AUGMENTING THE EFFECT OF ESSENCE THREAT THROUGH POSSESSION-SELF LINK STRENGTH

# 6.1 | Providers' possession-self link

Previous research demonstrated that in a variety of settings, consumers believe that objects may carry an essence and that such essence can be transferred between entities (Smith et al., 2016). For example, an everyday object like a pen previously touched by a highly creative person (Kramer & Block, 2014), a putter previously owned by a professional golfer (Lee et al., 2011), and a gambling slot machine after a seemingly lucky player won on it (Teed et al., 2012) are believed to bring desired outcomes because those objects carry essential properties from their earlier use. Newman et al. (2011) discuss how beliefs in transferred essence can turn an object into a potential carrier of the essence of a particular person (i.e., a celebrity) and influence its market value.

When Nemeroff and Rozin (2018), who formed the basis for the study of contagion effects on behavior and decision-making, revisited the conceptualization of contagion, they underlined that contagion, and the extended sense of self are two concepts in close relationship. According to Belk's extended self-theory Belk (1988), possessions can become an extension of oneself through self-connection and identification with the object. This internalization means that the object reflects a part of the owner's identity, making it bear an additional intrinsic value to its owner beyond its market value or tangible properties.

Ferraro et al. (2011) argue that the loss of such possessions means the loss of some aspect of the self in addition to the loss of the tangible item. Along the same line, Hellwig et al. (2015) found that regarding a possession as a "part of me" feeds fears of loss, damage, or contagion because the loss of such belongings can be regarded as a loss or a lessening of oneself. Here, we propose that when a belonging has such a special value to the owner, in that it carries a strong connection with the self, the loss of its essence will loom larger. Hence, we propose that self-identification with an item should amplify the negative effect of anticipated essence threat on willingness to share.

Study 2 is designed to test this proposition that the strength of the possession-self link augments the effect of anticipated essence loss on willingness to share possessions. We manipulated the strength of the possession-self link and let participants consider sharing an actual possession of theirs given it belongs to one of the different types of products we listed for them (see Appendix 8). In this study, 219 students (53% Female,  $M_{\rm age}$  = 19) participated in person in an on-campus behavioral lab in exchange for course credits.

# 6.2 | Pretest—Possession-self link manipulation

We designed (n = 139) a reading and writing task as a prime to manipulate the experienced possession-self link.

Participants first read a brief paragraph about either how one's possessions can relate to one's identity or how they merely provide a functional benefit (stimuli are provided in Appendix 9). Then, we presented them with a list of eight household items common among students (e.g., costume, game console, audio equipment, box game, suitcase, digital camera). Participants were asked to mark which of them they exclusively owned. After this, they were asked to select one, from among the items they exclusively owned, that would fit best the text they had just read. At this point, they were asked to write a detailed description of how this specific item either "relates to their identity" or "serves its function," depending on the priming condition. We then measured the extent of the possession-self link using the 6-item-scale "Incorporation to the Extended Self" developed by Sivadas and Machleit (1994) (i.e., "This object is part of who I am") (Appendix 4b). Those who elaborated on the self-identifying value of their item (M = 4.95, SD = 1.86) scored higher on the object's connection to their self-concept than their counterparts (M = 3.23, SD = 1.78) ( $\rho$  < 0.001, t = 5.585, df = 137, Cohen's d = 0.95).

## 6.3 | Procedure

The experiment had a one-factor (possession-self link: high or low) between-subjects design with random allocation. After performing the manipulation procedure as described above, we introduced a sharing platform's terms and conditions to the participants (see Appendix 10 for the material) and measured their WTS for the particular item that they chose for the manipulation task (i.e., "How likely are you to put your ... to this sharing platform, to rent it out in exchange for money?") on 9-point Likert scale. Following, essence threat was measured as in the previous studies. We also measured participants' desire for control (Burger & Cooper, 1979) to account for the fact that owners with a high desire for control may experience a reduced sense of control over their possessions, which refrains them from sharing them.

# 6.4 Results

A one-way ANOVA revealed that participants in the high possessionself link condition showed less WTS than their counterparts (M = 4,56, SD = 2.75; M = 5,41, SD = 3.02; F(1,217) = 4.745, p = 0.03, n2 = 0.02).

We tested the hypothesized interaction between possession-self link conditions (high/low), anticipated essence threat (measured), and the interaction predicts WTS (Process Model 1: Hayes, 2018). The interaction effect was significant (t = -2.253, p = 0.025, [-0.714, -0.048]). Anticipating essence threat affects WTS significantly only when the item is linked to the owner's self (t = -4.240. p < 0.001 [-1.609,-0.588]). This effect is mitigated when this link is not reinforced (p = 0.12). Introducing the control variable, desire for control, as a covariate did not change the significance of the hypothesized model.

We acknowledge that the possession-self link manipulation could prime participants to choose products that are more closely in touch with the body when used (mimicking the contact manipulation used in Study 1a through cloth-like or tool-like objects). Against this doubt on the endogeneity of independent variable, Appendix 11a shows the frequency of objects chosen in each condition and Appendix 11b lists how participants explained why they considered the chosen object to either "relate to their identity" or "serve its function."

Thus, the strength of the possession-self link becomes a significant moderator of the relationship between anticipated essence threat and WTS. When sharing a possession and its self-identifying value becomes very salient, the risk of essence threat hinders WTS, whereas in the case of possessions with low self-identifying value, the effect is mitigated.

Our last study tests the idea that anticipating essence threat can be mitigated by counteracting the idea of contagion with thoughts of sterilization.

# 7 | STUDY 3-MITIGATING THE EXPECTATION OF CONTAGION THROUGH THOUGHTS OF STERILIZATION

Cleaning practices such as washing hands, using liquid sanitizers, or antiseptic wipes are common in preventing the transmission of germs. These practices have also been connected to a more metaphysical sense of contagion. For example, previous research has shown that laundry washing, or hand cleaning, can metaphorically clear traces of the past and put an entity into a more neutral state (Lee & Schwarz, 2010; Newman & Bloom, 2014; Xu et al., 2012). In the context of sharing goods, sterilizing shared items has the potential to comfort essence-related anticipated contagion, going beyond confronting germ-related physical contagion thoughts.

In Study 3, we test the causal link between contact-based anticipated contagion and essence threat by manipulating the strength of these expectations. We used a manipulation, which we expected would lower expectations of contagion by making people think about the possibility of sterilization. As in Study 2, participants were asked to consider sharing different types of products.

We collected 261 responses via Prolific out of which 238 were valid (66% Female, Mage=36). We excluded 23 responses due to

failure to complete the study (2), not owning any of the listed items (2), or failure to select the right answer in the attention check question (19).

# 7.1 | Pretest—Manipulation on expectations of contagion

We designed and tested a manipulation method that makes the benefits of sterilizing more salient. By exposing participants to sterilizing products, we aimed to make it more salient that consumers can counteract both physical and nonphysical contagion effects.

After reading a cover story about consulting with consumers to assist in designing advertising messages, participants rated the importance of various product specifications of either three sterilizing (soap, cleaning wipes, hand sanitizer) or three neutral products (juice, battery, post-it notes). The product specifications on the sterilizing product condition underlined the sterilization benefits and efficiency of those products. Appendix 12 includes the images shown in each condition. Then all participants indicated their agreement with 6 statements that captured their belief in metaphysical contagion. When asked to explain how the product specification task and the questions about essence are related, three out of 102 participants correctly guessed the connection between the two and therefore were excluded from the analysis. Confirming our manipulation, the control group scored higher than the sterilizing-products-primed group on the following item: "Nonphysical entities (e.g., mood, essence) can be contagious" ( $M_{control}$ =5.66, SD = 1.32 vs.  $M_{cleaning}$  = 5.15, SD = 1.52, f(97) = -1.784, p = 0.039, Cohen's d = -0.36).

### 7.2 | Procedure

The experiment had one factor (sterilization salient vs. control) between-subjects design with random allocation. After performing the manipulation procedure as described above, we introduced again the hypothetical sharing platform's terms and conditions and asked them to select an item they exclusively owned from a list of items as in Study 2. We finally measured anticipated essence threat for that item if they were to rent it out, as well as participants' individual differences in superstitious thinking (Epstein & Meier, 1989) and contagion sensitivity with the measure adapted from Haidt et al. (1994) by Newman et al. (2011).

# 7.3 | Results

The data supported our expected pattern of results: A t-test revealed that the group exposed to the sterilizing products manipulation anticipated significantly less essence threat (Msterile=3.87, SD = 1.49; Mcontrol = 4.25, SD = 1.37; F(1,236) = 275, p = 0.04,  $\eta$ 2 = 0.02). An ANCOVA with contagion sensitivity and superstitious thinking as covariates still revealed a significant effect of the manipulation.

We acknowledge that the manipulation (exposure to different types of products) might have affected what participants considered sharing such that participants in the sterilization condition were cued into the importance of cleanliness, and thus chose items that involve less physical contact in use (e.g., digital camera vs. costume). Against this alternative mechanism that casts doubts on the causal validity of the study design, a Chi-square test shows that the participants' choice of objects did not vary by condition ( $X^2(9, N = 238) = 12.506$ , p = 0.186). Appendix 13 shows the frequency of objects chosen in each condition.

As we would expect due to our proposed process, making sterilizing options salient for people decreased their anticipated essence threat. Thus, this manipulation successfully decreased essence-related concerns and, potentially, the downstream negative effect on WTS.

# 8 | GENERAL DISCUSSION

The sharing economy has created markets in which individuals become providers as well as users. In this paper, we demonstrate that apart from physical contamination, essence-related concerns also come into play to determine consumers' openness to share a possession. In our studies, we find that a metaphysical construct, the anticipation of essence threat, can explain the lack of motivation to offer a possession within the sharing economy. We also determine that expectations of a user's (a stranger's) intimate contact with the product (Study 1a and 1b) drive willingness to share, particularly so for items to which owners are strongly connected (Study 2). Interestingly, it is possible to mitigate this concern by making sterilization practices more salient (Study 3).

Our research exclusively focused on the provider side as it is understudied despite being as important as the user side. Providing access to one's belongings as enabled by sharing platforms becomes a more novel phenomenon than that of acquiring access to goods and services as a consumer. This new phenomenon calls for a shift in consumers' mindset from being predominantly a buyer to become simultaneously a supplier (Hazée et al., 2019). In this paper, we establish how the concept of contagion applies to the supply side of the market.

Our studies are not free from limitations. Our data collection took place overlapping with the COVID-19 outbreak. This high level of awareness of the possibility of contagion may have caused a ceiling effect, hence our small effect sizes. To manipulate the extent to which touch activates contagion concerns, we pre-tested many methods including scrambled sentence tasks, introducing fictitious facts, and vignette-based manipulation methods, which Newman et al. (2011) had used. Only our manipulation using sterilizing products was able to successfully change participants' level of agreement with contagion-related principles. Finally, due to the novelty of the concept, we had to develop a scale to capture the extent of essence threat that a consumer may anticipate.

# 9 | CONTRIBUTIONS AND PRACTICAL IMPLICATIONS

This paper contributes to several research streams. First, it deepens our understanding of an understudied dimension of the sharing economy: the providers' side. Second, by exploring the role of a magical belief, metaphysical contagion, it answers the call for more research investigating novel heuristics and biases, which influence consumers in access-based consumption models (Eckhardt et al., 2019). This research shows evidence for how a metaphysical concept, belief in the possibility of essence change, can explain a lack of motivation to add a possession into sharing platforms. Building on Smith et al.'s (2016) findings on how the concepts of contagion and the extended self in objects affect consumers' valuation of goods, we investigate how these two concepts interplay in the minds of providers considering exposing their possessions to other users.

Third, the current approach to studying contagion serves to broaden its boundaries (Huang et al., 2017) by proposing and testing two new elements: (1) the underlying psychological process of anticipating essence change and (2) how it affects willingness-to-share as a dependent measure of interest. It also extends the growing body of research interested in understanding the role of metaphysical essence in consumer responses. The literature has empirically shown that physical contagion follows the principles of physical contact (i.e., the source of contagion must physically contact its target) and permanence (i.e., once contagion has been transmitted, it is resistant to purification; "once in contact, always in contact") (Nemeroff & Rozin, 2018). In our experiments, we found support for these principles in the case of physical contagion concerns. However, essencebased contagion concerns were shown to be responsive to the extent to which the contact is intimate (i.e., a closer and prolonged touch with the source).

Finally, this research yields actionable insights for existing sharing platforms as well as incumbent companies incorporating access-based services into their business models (e.g., Stellantis via Free2-Move, Nordstrom via Rent the Runway, furniture rental by IKEA). It adds support to the idea that promoting the sharing of possessions entails accounting for nonphysical contagion beliefs and individuals' connections with their possessions. Based on the findings of this research, we hope to provide insights to assist in expanding peer-to-peer goods sharing and the more efficient utilization of goods.

### 10 | FUTURE RESEARCH

Our theorizing suggests that the negative aspects of metaphysical contagion could be a relatively small concern for renters in P2P sharing activities as they don't own the product, spend less time with it, and have rental mindset that evokes less caring and responsibility (Morewedge et al., 2021). Nevertheless, metaphysical contagion beliefs could have both positive and negative effects on one's motivation to rent from a certain provider depending on this person's appearance, characteristics, or other listed products in their portfolio

as those could potentially carry properties over to them. For example, people prefer attractive hosts and pay relatively higher to stay at their Airbnb offerings, even if they never get to be in contact or share the rental space with them (Jaeger et al., 2019).

Overall, sharing platforms may be changing consumer behavior by making the concept of ownership more malleable. Consumers are motivated to choose access over ownership even for products that are central to their life (Pantano & Stylos, 2020). Users' access to goods without ownership and providers' temporary disposition of those goods challenges the logic of the longestablished buy-use-dispose consumption cycle (Philip et al., 2015). Future research may delve into investigating acquisition and disposal related motivations that are prominent on both sides of the trade.

Finally, we find that only by making means of sterilizing more salient, we can moderate people's anticipation of essence threat when exposing their possessions to strangers' intimate contact. Previous research finds that consumer reluctance to donate possessions with sentimental value can be counteracted by memory preservation techniques like taking a photo (Winterich et al., 2017). More empirical research is needed to test alternative divestment rituals that could work against owners' reluctance to part with their possessions.

Our research demonstrates the importance of essence-related concerns triggered in the providers' minds. In the context of shared physical goods, people are more concerned by contagion when physical contact is close or extended. Future research can study the application of the same concept to the case of shared digital goods (i.e., subscription accounts, software, NFT artwork) with other users (e.g., sharing the Netflix login). An interesting dimension to explore is how contagion concerns are experienced in contexts in which other users' behavior directly influences the owners' future experience of the product (e.g., by altering the suggestion algorithm). Another such dimension is the role of interpersonal familiarity with the others in the sharing transaction (e.g., friends against strangers). Whether the other person is close to oneself, or similar to oneself, or not may determine how contagion on digitally shared goods is evaluated.

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#### SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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