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# Curbing customer-to-customer misbehavior contagion in the sharing economy

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## ABSTRACT

The sharing economy has fundamentally transformed customers' lives. Providing short-term access to resources, however, creates environments in which customers regularly become the target of other customers' misbehavior, either personally or toward shared resources. Although this customer-to-customer (C2C) misbehavior is known to be contagious, the reasons for its spread and the effectiveness of containment measures across sharing economy markets remain unclear. Three experiments reveal the moderating role of on-site supervision: platform-provider-directed blame attributions drive C2C misbehavior contagion in settings with formal on-site supervision, while social norms underlie contagion when on-site supervision is absent. Perpetrator-directed blame attributions reverse contagion irrespective of on-site supervision. More intrusive platform and peer-provider measures (in-person reprimands, in-app messages, and photo features) are most effective at curbing contagion by reducing social norms to misbehave and shifting blame to the perpetrator. However, these measures are only effective at certain C2C misbehavior severity levels for different sharing economy market types.

## 1. Introduction

The rise of the sharing economy has radically transformed consumers' lives (Eckhardt et al., 2019). Airbnb, WeWork, and Lime are prominent examples of firms offering temporary access to—rather than permanent ownership of—lodgings, office space, and e-bikes. Until recently, public and academic debate has focused on the ways in which firms operating in the sharing economy spur innovation and benefit customers by, for example, offering easier access to resources, decreasing inefficiencies, or reducing nonconsumption of marginalized consumers (e.g., Bardhi & Eckhardt, 2012; Schaefers et al., 2018). Providing short-term access to resources, often with limited on-site supervision, however, also fosters disinhibiting environments in which customers are more likely to misuse shared resources and engage in misbehavior toward other customers (Schaefers et al., 2016). Following Danatzis and Möller-Herm (2023), we refer to these negative customer-to-customer (C2C) interactions as C2C misbehavior, defined as “any behavioral act by a customer directed against other customers personally or against shared resources that violates prevalent social norms in a service setting” (p. 459).

While C2C misbehavior occurs regularly across industries (Fisk et al., 2010), it appears to be particularly endemic in the sharing economy. For example, news reports suggest that e-scooter customers regularly vandalize, damage, steal, and even burn or throw their rented e-scooters or bikes into lakes and rivers (Ho, 2018). Similarly, co-working space customers often complain about littered or noisy workspaces and the theft of personal belongings (Herhold, 2020), while peer-to-peer (P2P) lodging providers frequently deal with unruly guest behavior, damaged property, safety issues, and territorial behavior among guests (Airbnb, 2022; Carville, 2021). Curbing C2C misbehavior in the sharing economy is therefore of utmost managerial importance, not only because it affects companies by disrupting operations, damaging reputations, and incurring costs, but also because of the harm that such misbehavior can inflict on customers. What is more, recent research shows that C2C misbehavior is *contagious* (e.g., Danatzis & Möller-Herm, 2023; Schaefers et al., 2016): Customers who experience other customers' C2C misbehavior, particularly when it is more severe, are more likely to engage in C2C misbehavior themselves, thus exacerbating the negative consequences.

Little is known, however, about how sharing economy firms can curb

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the spread of C2C misbehavior. Although [Schaefer et al. \(2016\)](#) and [Srivastava et al. \(2022\)](#) provide first insights into how contagion can be lessened by reducing owner anonymity and increasing brand strength, community, and company identification, implementing these measures requires significant investment. Their effects may also take time to materialize, and they may not be consistent with a firm's positioning (e.g., for low-cost firms). Similarly, [Danatzis and Möller-Herm \(2023\)](#) offer guidance on what frontline employees (FLEs) could do to curb contagion (e.g., in-person interventions, loudspeaker announcements). Yet, several significant research gaps remain:

First, opportunities for FLEs to intervene are limited, especially on P2P platforms, such as Airbnb and Uber. Unlike business-to-consumer (B2C) platforms—Lime or WeWork, for example, where platform providers own the shared assets—in P2P platforms, shared assets are owned by other platform users, and FLEs are notably absent ([Wirtz et al., 2019](#)). P2P platforms rely instead on peer providers (i.e., peers granting access to a particular asset; [Benoit et al., 2017](#)), such as Airbnb hosts and Uber drivers, to enforce service rules. However, unlike FLEs, peer providers usually lack the required authority, training, or support structures to deal with C2C misbehavior, and little is known about the measures they can employ to curb this behavior.

Second, many B2C and P2P platforms are characterized by low levels of *consociality*—the degree to which a platform allows for social interaction ([Perren & Kozinets, 2018](#)). For example, platforms such as sharing services for free-floating cars or e-scooters (e.g., Lime, Zipcar) and fully automated 24/7 co-working spaces (e.g., HomeBase Share) typically monitor and regulate exchanges extensively, and often exclusively, through the technology platform itself, rather than relying on either FLEs or peer providers. In these markets with high levels of *platform intermediation* ([Perren & Kozinets, 2018](#)), platforms often employ technological measures instead, such as in-app messages or photo features (Free [FreeNow, 2021](#); [Lime, 2021](#)), to curb C2C misbehavior, yet their effectiveness so far remains unknown.

Third, prior research yields mixed results regarding the psychological mechanisms that drive contagion: [Schaefer et al. \(2016\)](#) and [Srivastava et al. \(2022\)](#) find that social norms to misbehave fuel contagion in car- and bike-sharing contexts, and advocate for ways to reduce these norm perceptions, through measures such as more cleanliness checks and increased messaging about acceptable behaviors. In contrast, [Danatzis and Möller-Herm \(2023\)](#) find that C2C misbehavior spreads because customers blame FLEs for the misbehavior of other co-working customers, and stress the need to reduce or shift such provider-directed blame attributions by, for example, shaming offenders. On-site supervision has also been suggested, though not empirically tested, to impact why misbehavior occurs in the sharing economy ([Bardhi & Eckhardt, 2012](#)), but it is not clear whether and how such supervision—be it formally carried out by FLEs or informally by peer providers—impacts these mechanisms. Understanding these contagion mechanisms and related boundary conditions is, therefore, critical for two main reasons: 1) for designing effective countermeasures to curb contagion and 2) for preventing such behavior in the first place ([Fombelle et al., 2020](#)), because appropriate strategies fundamentally hinge on the specific mechanisms at play. Thus, this paper aims to answer the following two questions:

- (1) What primary psychological mechanisms underlie the spread of C2C misbehavior in sharing economy markets, given the presence or absence of either formal or informal on-site supervision?
- (2) What can platform and peer providers do to effectively curb C2C misbehavior contagion across sharing economy markets?

To shed light on these questions, we conducted three online experiments, covering the four conceptual archetypes of sharing economy markets—Forums, Matchmakers, Hubs, and Enablers—proposed by [Perren and Kozinets \(2018\)](#), which vary in their consociality and platform intermediation. Using these types enabled us to systematically

study a) how C2C misbehavior spreads and b) the efficacy of multiple measures to curb contagion in both B2C and P2P settings with formal (staffed gyms, Study 1) or informal on-site supervision (carpooling, Study 2), and no on-site supervision (unstaffed co-working spaces and gyms, Studies 1 and 3). Results reveal the moderating role of on-site supervision in determining the primary psychological mechanism underlying C2C misbehavior contagion. In settings with formal on-site supervision, C2C misbehavior spreads because customers blame the platform provider for other customers' misbehavior, while social norms do not mediate contagion. Conversely, if on-site supervision is absent, contagion is exclusively driven by social norms, while perpetrator-directed blame attributions reverse contagion irrespective of supervision. Results also show that more intrusive platform and peer provider measures, such as in-person reprimands, in-app messages, and photo features, are the most effective at curbing contagion by reducing social norms, yet these measures are ineffective when misbehavior is severe. More intrusive measures also curb contagion by shifting blame to the perpetrator.

Our research makes three key contributions: First, this research significantly expands previous research on C2C misbehavior contagion, moving beyond B2C access-based services like car-sharing ([Schaefer et al., 2016](#)), bike-sharing ([Srivastava et al., 2022](#)) and co-working services ([Danatzis & Möller-Herm, 2023](#)). By examining the contagion effect across the four sharing economy types proposed by [Perren and Kozinets \(2018\)](#), this research offers nuanced insights into how contagion unfolds for both direct (i.e., personal boundary violations, noise) and indirect (i.e., littering) C2C misbehavior across B2C and P2P settings that inherently differ in consociality and platform intermediation. Second, by outlining the moderating role of on-site supervision in determining whether social norms or blame attributions drive contagion, this study clarifies the primacy of psychological mechanisms underlying the spread of C2C misbehavior, resolving previously mixed results. Third, this research is the first to provide empirical evidence for the effectiveness of anti-misbehavior measures that platform and peer providers can readily employ to curb contagion. In doing so, our study advances the limited conceptual ([Fombelle et al., 2020](#)) and empirical work in this area ([Danatzis & Möller-Herm, 2023](#); [Schaefer et al., 2016](#)), thus addressing calls to consider potential drawbacks or the “dark side” of sharing economy markets ([Eckhardt et al., 2019](#)).

## 2. Conceptual background

### 2.1. C2C misbehavior in the sharing economy

Customer misbehavior can generally be understood as “behavioral acts by consumers, which violate the generally accepted norms of conduct in consumption situations” ([Fullerton & Punj, 2004](#), p.1239). Prior research primarily focuses on misbehavior that targets either the firm (e.g., [Tonglet, 2002](#)) or its FLEs (e.g., [Bitner et al., 1994](#)). Although it has received the least scholarly attention, customer misbehavior can also be directed at *other customers*. Such C2C misbehavior is nothing new, it regularly occurs across industries (e.g., [Griffiths & Gilly, 2012](#); [Grove, Pickett, Jones, & Dorsch, 2012](#); [Shen et al., 2020](#)), and has been shown to spread to other customers (see [supplementary Table A1](#) for an overview of empirical research on C2C misbehavior contagion). The rise of the sharing economy, however, exacerbates C2C misbehavior by providing customers with more avenues to target each other with varying degrees of severity ([Fombelle et al., 2020](#)).

Defined as “a scalable socioeconomic system that employs technology-enabled platforms to provide users with temporary access to tangible and intangible resources” ([Eckhardt et al., 2019](#), p. 7), sharing economy markets can generally be distinguished based on the number of entities involved in the exchange and the ownership of the assets being shared: B2C platforms, such as WeWork, Zipcar, and Lime “rely predominantly on marketer-provided assets and resources” ([Wirtz et al., 2019](#), p. 456). Shared assets, whether the co-working space, the car, or

the e-bike, are owned by the platform provider, and exchanges are dyadic, with the customer accessing these assets while the platform provider enables both the exchange and access (Benoit et al., 2017). P2P platforms, like Airbnb or Uber, in turn, refer to “two- or more-sided peer-to-peer online platforms through which people collaboratively provide and use capacity-constrained assets and resources” (Wirtz et al., 2019, p. 458). Shared assets are owned and provided by the peer provider and not the platform provider. P2P exchanges are thus triadic, with the customer accessing shared assets (e.g., the short-term rental) while being served by two distinct service providers: the peer provider granting access (e.g., the Airbnb host) and the platform provider (e.g., Airbnb) facilitating the exchange.

Both B2C and P2P platforms are prone to C2C misbehavior, yet the factors driving their susceptibility crucially hinge on their level of consociality and platform intermediation. According to Perren and Kozinets (2018), consociality refers to the “physical and/or virtual copresence of social actors in a network, which provides an opportunity for social interaction between them” (p. 23). Platform intermediation refers to the degree to which “the deployment of a software platform and its various digital tools as an intermediary ... coordinates the exchange between network actors” (p. 23). Thus, four “lateral exchange markets”, or sharing economy “archetypes” can be distinguished: (1) Forums, with high consociality and low platform intermediation (e.g., Craigslist, Carpool World, Freecycle); (2) Enablers, with low consociality and low platform intermediation (e.g., eBay, ClassPass); (3) Matchmakers, with high consociality and high platform intermediation (e.g., Airbnb, Uber,

WeWork), and (4) Hubs, with low consociality and high platform intermediation (e.g., Zipcar, Lime, HomeBase Share). Based on their consociality and platform intermediation, these types vary greatly in their sources of susceptibility to C2C misbehavior (see Fig. 1).

For instance, sharing economy markets with *low consociality*, such as Enablers (e.g., ClassPass, eBay) and Hubs (e.g., Zipcar, Lime, HomeBase Share), typically involve limited or no direct interaction between unknown customers. Customers primarily experience indirect C2C misbehavior, when other customers misuse resources that are typically shared successively (Schaefers et al., 2016), such as leaving litter in rental cars, inappropriately handling gym equipment, or overusing meeting rooms. Due to limited social interaction, these indirect acts of C2C misbehavior often result from a heightened sense of anonymity and detachment from shared resources. Customers have only a minimal sense of responsibility and accountability to each other and to the goods or services they temporarily access (e.g., cars, office space, fitness facilities), thus increasing the risk of misuse and antisocial behavior among customers (Bardhi & Eckhardt, 2012). In low-consociality markets, this risk is further exacerbated because customers commonly access resources without any on-site supervision. For example, free-floating car- or e-scooter providers (e.g., Lime, Zipcar, FreeNow), or 24/7 co-working spaces (e.g., HomeBase Share) can only inspect accessed resources periodically, rather than after each use (Schaefers et al., 2016). Coupled with limited opportunities for informal social control by peers (Chaurand & Brauer, 2008), this lack of on-site supervision can foster ambiguous, disinhibiting environments in which customers may perceive a

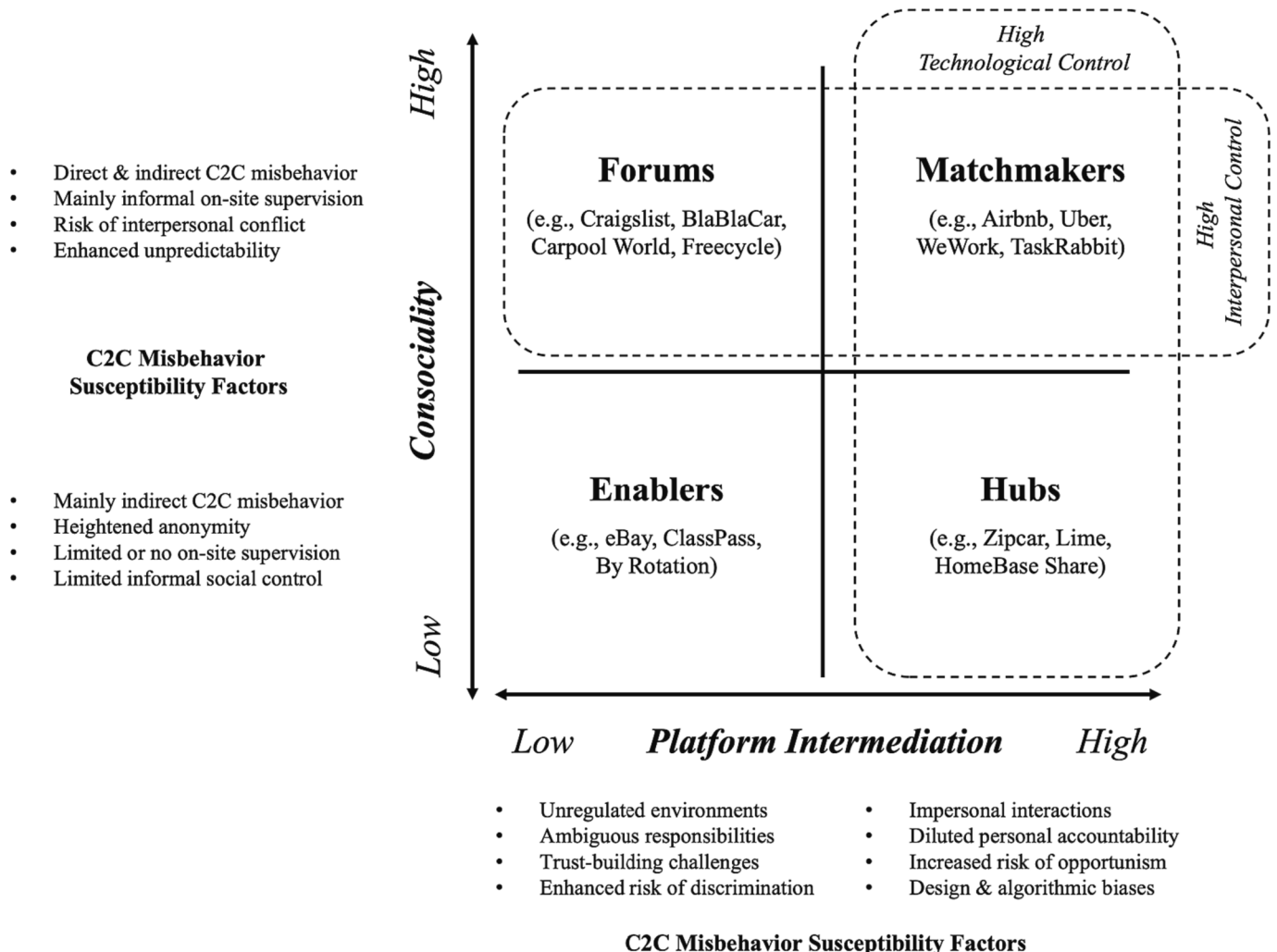


Fig. 1. C2C misbehavior in the sharing economy.

lower likelihood of detection (Wirtz & Kum, 2004), or view engaging in C2C misbehavior as having little personal or immediate consequences. These perceptions, in turn, may reduce mental restraint, promote opportunistic tendencies, and increase C2C misbehavior (Bardhi & Eckhardt, 2012).

On the other hand, sharing economy markets with *high consociality*, such as Forums (e.g., Carpool World, BlaBlaCar, Freecycle) or Matchmakers (e.g., Airbnb, Uber, WeWork) are also prone to increased C2C misbehavior. Given their interactive nature, misbehavior extends beyond indirect incidents to direct acts of C2C misbehavior in which customers are targeted personally. Examples include verbal or physical abuse of other customers using the same facilities, territorial behaviors in shared spaces, or toxic online behaviors. Although some formal on-site supervision is usually exercised in B2C Matchmaker markets by a few FLEs (e.g., WeWork), P2P Matchmaker markets (e.g., Airbnb, Uber) and Forums (e.g., Carpool World), mostly rely on informal on-site supervision through peer providers. Yet, unlike FLEs, peer providers often lack the authority or training to address C2C misbehavior, which can blur responsibilities among users, create conflicting expectations about the proper use of shared resources, and lead to power imbalances between peer providers and customers. While the rich social interactions in Matchmaker and Forum markets, including Airbnb and BlaBlaCar, reduce anonymity by fostering connections and rapport between consumers and peer providers, potentially enhancing informal social control (Chaurand & Brauer, 2008), their high consociality also introduces a degree of unpredictability that may elevate the risk of misunderstandings, opportunism, conflict, and confrontations (Perren & Kozinets, 2018).

Sharing economy markets with *low platform intermediation*, in turn, such as Enablers (e.g., ClassPass, eBay) and Forums (e.g., Carpool World, BlaBlaCar, Freecycle), feature B2C or P2P exchanges with minimal coordination by the platform provider. The absence of centralized platform governance, however, can foster unregulated environments where responsibilities are ambiguous, and accountability is diffused. Beyond verifying user identities, urging caution about the exchanges, and encouraging the use of reporting and rating systems, platform providers typically offer limited trust-building mechanisms (Perren & Kozinets, 2018), making these markets more permissive to unethical behaviors (Wirtz et al., 2019).

Finally, sharing economy markets with *high platform intermediation*, encompassing Matchmakers (e.g., Airbnb, Uber, WeWork) and Hubs (e.g., Zipcar, Lime, HomeBase Share), display a high degree of centralized platform governance. While platform exchanges are tightly coordinated and managed by the technical platform, an overreliance on algorithms, digital tools, and regulations may also depersonalize experiences, decrease empathy toward other users, and dilute personal accountability for shared assets (Perren & Kozinets, 2018), as evidenced, for example, by the damaging of Lime e-scooters (Ho, 2018), unruly Airbnb guest behavior (Carville, 2021), or the littering of co-working spaces (Herhold, 2020) despite high platform intermediation.

## 2.2. Curbing C2C misbehavior

The level of consociality and platform intermediation not only crucially determines the root causes of C2C misbehavior in sharing economy markets, but also informs the strategies firms can use to curb or prevent such misbehavior. Anti-misbehavior measures span from using interpersonal control derived from consociality at one end to leveraging technological control offered by platform intermediation at the other (Perren & Kozinets, 2018).

Specifically, *high-consociality* markets (Forums and Matchmakers) often rely on interventions by platform FLEs (e.g., WeWork staff) or peer providers (e.g., the Airbnb host, the BlaBlaCar driver). These interventions usually involve some enforcement of explicit or implicit service rules, referring to “work-related tasks whereby frontline employees [or peer providers] must, as part of their job [or role],

intentionally and knowingly cause unpleasant experiences to dysfunctional customers for the benefit of other customers, employees and the organization as a whole” (Huang, Fang, & Liu, 2021, p. 2–3). Previous research has found that politely reprimanding customers (Henkel et al., 2017) and offering a justification for enforcing rules (Habel et al., 2017) is particularly effective in curbing misbehavior. Similarly, Danatzis and Möller-Herm (2023) show that FLEs should prioritize personalized interventions that call out the perpetrator. For P2P Forums, in turn, Perren and Kozinets (2018) suggest how community rule enforcement by voluntary peer moderators could effectively govern peer interactions in the absence of FLEs.

Sharing economy markets with *high platform intermediation*, on the other hand, such as Matchmakers and Hubs, usually (also) rely on technology to curb C2C misbehavior. Often known as servicescape surveillance devices (Bonfanti, 2016), traditional retail or hospitality settings routinely use devices such as closed-circuit television (CCTV) or radio-frequency identification tags to curb customer misbehavior (Hayes & Downs, 2011). However, C2C misbehavior in Matchmaker or Hub markets often occurs beyond immobile spaces such as stores and hotels, instead taking place in decentralized networks of, for example, Airbnb peer accommodations, free-floating FreeNow cars, or Lime e-scooters where traditional surveillance tools may be unsuitable or too costly to implement. Instead, Matchmaker and Hub platforms often use mobile surveillance solutions through users’ smartphones and built-in mobile app features that are built on the technology platform itself. Examples include mobile access control systems turning smartphones into remote keys (WeWork, 2019), in-app messages reminding customers of service rules when accessing shared resources (Klein et al., 2022), and in-app photo features requiring customers to submit photos of shared goods or spaces before or after use (Free FreeNow, 2021; Lime, 2021).

Although widely used by many Matchmaker and Hub platforms, such as Airbnb, Lime, or FreeNow, the effectiveness of these technological measures in curbing C2C misbehavior contagion remains unknown. Similarly, empirical evidence is lacking on the effectiveness of social measures that high-consociality platforms (including Forums such as Carpool World or BlaBlaCar) can employ beyond FLE interventions. This research addresses these gaps.

## 3. Hypothesis development

### 3.1. Theoretical foundations

This paper is grounded in broken windows theory (Wilson & Kelling, 1982) and attribution theory (Weiner, 1985, 2001), both of which highlight the interplay between the external environment and cognitive processes in driving individual behavior. Both theories have been applied in recent empirical studies that examine the spread of C2C misbehavior in sharing economy contexts (e.g., Danatzis & Möller-Herm, 2023; Schaefers et al., 2016; Srivastava et al., 2022). Rooted in criminal sociology, broken windows theory posits that visible signs of disorder, such as graffiti and broken windows, can increase criminal activity and social decay (Wilson & Kelling, 1982). This occurs because unchecked disorder signals that uncivil behavior is not only unpunished but is socially acceptable, thereby encouraging others to violate local norms. We use broken windows theory to explain how C2C misbehavior spreads in sharing economy settings, how this contagion is fueled by perceptions that C2C misbehavior is the prevalent social norm in a setting, and how supervision and anti-misbehavior measures can alter these norm perceptions and curb contagion (H1, H2a, H3a, H4a/d). Attribution theory (Weiner, 1985, 2001), in turn, focuses on how individuals interpret the causes of events and others’ behavior, with blame attributions and justifications for misbehavior arising from their causal interpretations (Harvey et al., 2017). Hence, we use attribution theory to explain how blame attributions drive C2C misbehavior contagion, and how supervision and the intrusiveness of anti-misbehavior measures can

modify these blame attributions to reduce contagion (H2b-d, H3b/c, H4b/c/e). Next, we detail the theoretical rationale for each hypothesized relationship. Our conceptual model is illustrated in Fig. 2.

3.2. C2C misbehavior contagion

C2C misbehavior is contagious when a misbehaving customer induces another customer to also violate the generally accepted norms of conduct. Compared to customer revenge (Grégoire et al., 2018), C2C misbehavior contagion refers to “the spread of C2C misbehavior both beyond the initial perpetrator and beyond simple tit-for-tat reciprocity, as victims target other innocent customers with misbehaviors that may be unrelated to the perpetrator’s initial transgression” (Danatzis & Möller-Herm, 2023, p. 12, italics in original). Drawing on broken windows theory (Wilson & Kelling, 1982), both direct (e.g., territorial behavior of WeWork customers, verbal abuse of BlaBlaCar customers) and indirect acts of C2C misbehavior (e.g., littering of Zipcars, mishandling of Lime e-scooters) can be understood as visible signs of social disorder that perpetuate social decay in sharing economy markets. These signs, no matter how minor, communicate an unmonitored space where C2C misbehavior is left unchallenged, thereby increasing its frequency and saliency (Sousa & Kelling, 2019).

Broken windows theory further posits that varying degrees of social disorder lead to different outcomes (Harcourt, 1998). The social disorder caused by C2C misbehavior is likely to vary depending on its perceived severity—the magnitude of harm that an act of C2C misbehavior is judged to inflict on other customers (Karelaia & Keck, 2013). Harm may be both intangible (e.g., annoyance, inconvenience) or tangible (e.g., damaged shared equipment, monetary loss) (Huang, 2008). The higher that customers rate the severity of other customers’ C2C misbehavior (e.g., the territorial behavior of WeWork customers),

the higher they will judge the social disorder of a particular environment (e.g., the WeWork co-working space) and the greater the likelihood that these customers will also engage in related (e.g., territorial behavior) or unrelated (e.g., littering, noise) C2C misbehavior themselves, although not necessarily in similarly severe forms. This reasoning aligns with previous empirical work, notably Keizer et al. (2008), who conducted several field experiments manipulating the degree of disorder in shared public spaces, showing how signs of indirect C2C misbehavior, such as graffiti or littering, lead to the spread of other C2C misbehavior such as theft. Similarly, Danatzis and Möller-Herm (2023) found that co-working space customers exposed to different levels of direct C2C misbehavior, such as noise in shared workspaces, were more likely to engage in diverse C2C misbehavior, the more severe they perceived other customers’ C2C misbehavior. Thus:

**H1:** Greater perceived severity of other customers’ C2C misbehavior leads to increased contagion, as customers are more likely to engage in C2C misbehavior themselves.

3.3. Contagion mechanisms

Previous empirical research suggests two key contagion mechanisms driving the spread of C2C misbehavior in sharing economy contexts: 1) perceptions of social norms to misbehave (e.g., in car- or bike-sharing contexts; Schaefers et al., 2016; Srivastava et al., 2022), and 2) blame attributions (e.g., in co-working contexts; Danatzis & Möller-Herm, 2023).

The first mechanism proposes that C2C misbehavior spreads because of heightened social norms to misbehave. According to broken windows theory, both direct and indirect acts of C2C misbehavior resemble broken windows, signaling that “no one cares, and so breaking more

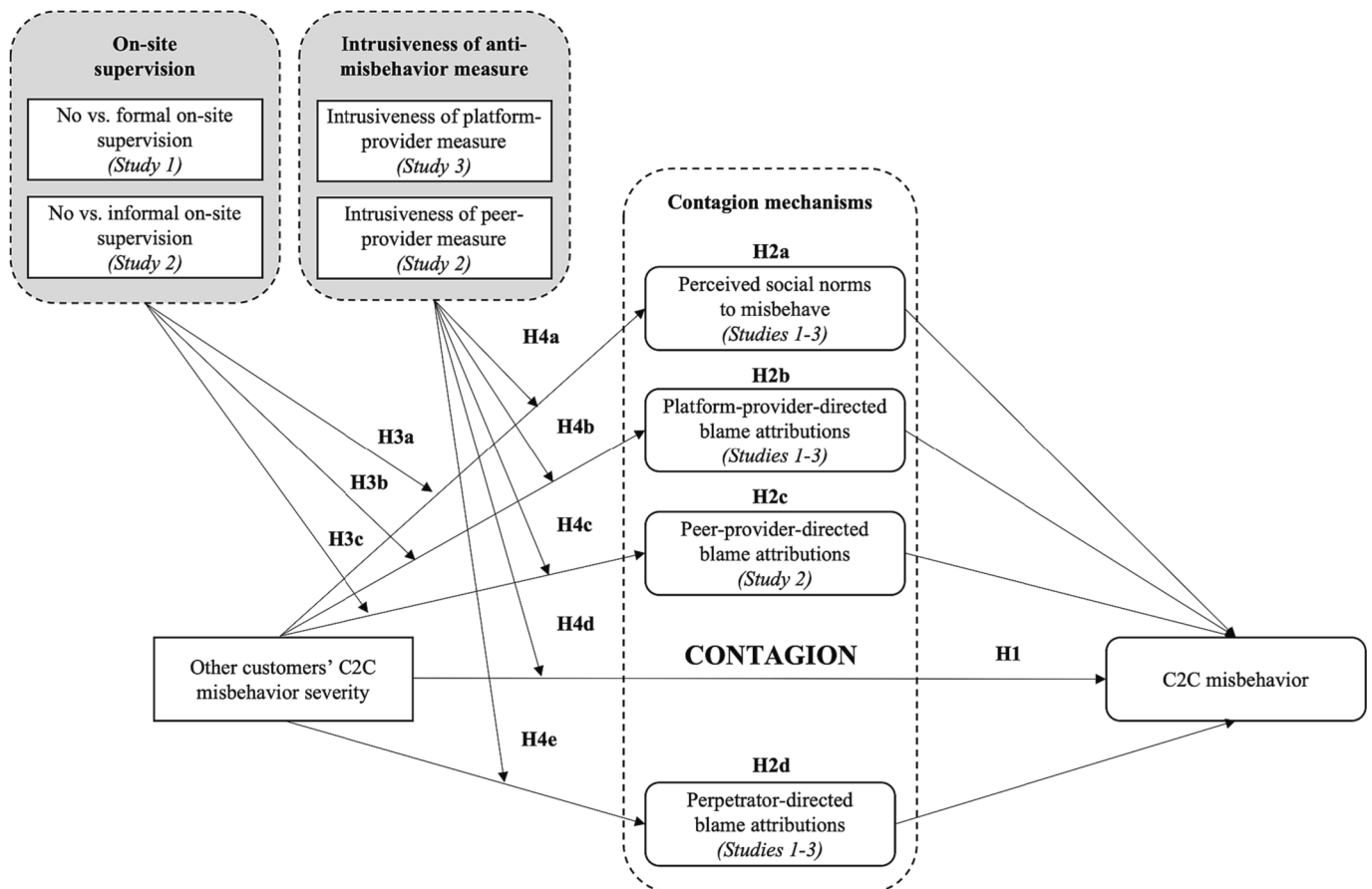


Fig. 2. Overview of the conceptual model and hypotheses studied in this research.

windows costs nothing” (Kelling & Wilson, 1982, p. 31). Thus, observing direct C2C misbehavior, such as territorial behavior in shared spaces (e.g., the WeWork office, the shared Airbnb rental), or signs of indirect C2C misbehavior, like damaged shared equipment in ClassPass gyms or mishandled Lime e-bikes, serves as a cue of prevalent social norms in a service environment. Customers exposed to these cues tend to judge these behaviors as common and socially acceptable (Sousa & Kelling, 2019). As a result, C2C misbehaviors become normalized as “informal but widely understood rules” (Kelling & Wilson, 1982, p. 30) within a particular environment, which, in turn, encourages other customers to engage in similar behaviors, thereby promoting their spread. Schaefers et al. (2016) and Srivastava et al. (2022) provide empirical support for the role of social norms in driving C2C misbehavior contagion in car- and bike-sharing contexts.

The second contagion mechanism is based on causal attributions of blame. According to attribution theory (Weiner, 1985, 2001), C2C misbehavior is seen as a negative outcome that sharing economy firms “should” have controlled and that only occurred because of the platform’s or the peer provider’s negligence, which then leads to them being blamed for the misbehavior of other customers. Notably, in B2C platforms, such as WeWork, HomeBase Share, or Lime, the customer interacts with a single service provider (i.e., the platform provider), and this sole provider can therefore become the target of blame. On the other hand, in P2P platforms, such as Airbnb, Uber, or BlaBlaCar, where the exchange is triadic, involving the customer, the peer provider, and the platform provider (Benoit et al., 2017), both the peer provider (e.g., the Airbnb host) and the platform provider (e.g., the Airbnb platform) can become targets of blame. Attribution theory (Weiner 2006, p. 33) further suggests that an individual’s “judgment of responsibility [and thus, blame], in turn, produces antisocial behavioral reactions including ... retaliation”. One form that retaliation can take is to equally engage in misbehavior and target innocent customers or shared resources. Retaliation research has shown how such “immoral” retaliation can spill over to innocent parties due to perceived insufficient supervision (Komarova Loureiro et al., 2018). Danatzis and Möller-Herm (2023) provide initial experimental evidence that provider-directed blame attributions drive C2C misbehavior contagion in a co-working context. Thus, we propose:

**H2a-c:** The more severe customers perceive other customers’ C2C misbehavior to be, the more they a) view it as a social norm, b) blame the platform provider, and c) blame the peer provider, resulting in increased engagement in C2C misbehavior.

Importantly, blaming the platform or peer provider for other customers’ misbehavior does not stop customers from also blaming the perpetrator (Rummelshagen & Benkenstein, 2017). Recent research shows that perpetrator-directed blame attributions can even reverse C2C misbehavior contagion (Danatzis & Möller-Herm, 2023). These findings align with attribution theory (Shaver, 1970), suggesting that customers disassociate themselves from perpetrators, resulting in increased benevolent behaviors toward innocent others. Thus:

**H2d:** The more severe customers perceive other customers’ C2C misbehavior to be, the more they blame the perpetrator, resulting in decreased engagement in C2C misbehavior.

### 3.4. The moderating role of on-site supervision

On-site supervision is frequently suggested, though not empirically tested, to influence the dynamics and contagion of C2C misbehavior in the sharing economy (Bardhi & Eckhardt, 2012; Danatzis & Möller-Herm, 2023; Schaefers et al., 2016). We define on-site supervision as the direct observation of service processes and activities of exchange participants by a service provider who bears responsibility for the outcomes of the exchange, conducted at the location where the service is provided. This supervision is implemented either formally by platform FLEs (e.g.,

WeWork staff) or informally by peer providers (e.g., Airbnb hosts).

We expect both contagion mechanisms, social norms and blame attributions, to underlie C2C misbehavior contagion across settings with and without formal or informal on-site supervision. For instance, drawing on attribution theory (Weiner, 1985, 2001), customers are likely to blame the platform or peer provider for the wrongdoing of other customers both in settings with formal or informal on-site supervision (because they feel that the platform or peer provider failed to adequately enforce service rules), and in settings without any on-site supervision (because they feel that the platform or peer provider failed to put adequate measures in place to protect them personally or the resources that they share with others). Similarly, and in line with broken windows theory (Kelling & Wilson, 1982), increased social norms to misbehave are likely to occur, and drive contagion, regardless of on-site supervision because the presence or absence of on-site supervision does not preclude customers from directly observing misbehaving customers or indirect signs of such behavior.

Nevertheless, we expect the contagion effect of platform or peer-provider-directed blame attributions (vs. social norms) to be stronger when formal or informal on-site supervision is present (vs. absent), and vice versa. This is because customers typically expect the platform or peer provider to intervene when they are confronted with C2C misbehavior (Baker & Kim, 2018). Failure to do so signals platform and peer provider negligence, which, according to attribution theory (Weiner, 1985, 2001), fuels blame attributions. Naturally, these perceptions of negligence (and subsequent blame attributions) are likely to be stronger toward the service-providing actor who is seen to fail to provide adequate on-site supervision. For instance, given the triadic nature of P2P exchanges (Benoit et al., 2017), in settings with informal on-site supervision, customers may blame both the peer provider (e.g., the Airbnb host, the BlaBlaCar driver) and the platform provider (e.g., the Airbnb or BlaBlaCar platform) for failing to address C2C misbehavior. Yet, blame attributions are likely to be stronger toward the peer provider because they are seen as personally responsible (Weiner, 2001) for the occurrence of the misbehavior due to their supervision failure. Conversely, in the absence of any on-site supervision, customers are more likely to judge C2C misbehavior as the “informal but widely understood rules” (Kelling & Wilson, 1982, p. 30) (i.e., prevalent social norms) within a given environment that informs their behavior. Thus, we posit:

**H3a:** In settings without on-site supervision, C2C misbehavior contagion is primarily driven by perceptions of social norms to misbehave.

**H3b:** In settings with formal on-site supervision, C2C misbehavior contagion is primarily driven by platform-provider-directed blame attributions.

**H3c:** In settings with informal on-site supervision, C2C misbehavior contagion is primarily driven by peer-provider-directed blame attributions.

### 3.5. The moderating role of the intrusiveness of anti-misbehavior measures

Based on broken windows theory (Wilson & Kelling, 1982), anti-misbehavior measures, including social and technological strategies, such as in-person interventions and mobile surveillance solutions, act as environmental cues that counteract C2C misbehavior. When platform or peer providers employ these measures, they prompt a renegotiation of the “rules of the street” (Sousa & Kelling, 2019) and “reinforce the informal control mechanisms of the community itself” (Wilson & Kelling, 1982, p. 34). This leads to a decrease in the perception that C2C misbehavior is a social norm in a given service environment, ultimately curbing its spread. Attribution theory (Weiner, 2001) suggests that these measures also reduce blame directed toward the platform or peer provider while increasing blame attributions toward the perpetrator.

Customers are less likely to hold the platform or peer provider responsible for C2C misbehavior (and hence judge such behavior to be less under their control) when they see active enforcement of service rules or the use of technological measures to prevent C2C misbehavior. Instead, these measures shine a spotlight on the perpetrators, strengthening victims' locus attributions regarding the cause of the misbehavior (Weiner, 1985). This then, attenuates contagion by increasing perpetrator-directed blame attributions.

However, the extent to which anti-misbehavior measures reduce social norms to misbehave and adjust attributions of blame (both directed at the platform or peer provider and the perpetrator) should depend on the extent to which customers perceive them as intrusive. Intrusiveness refers to "a perception or psychological consequence that occurs when an audience's cognitive processes are interrupted" (Li, Edwards, & Lee, 2002, p. 39). Therefore, anti-misbehavior measures are not intrusive per se but must be viewed as interrupting the flow of a customer's service experience (Edwards et al., 2002). For instance, using one's smartphone to gain access to a shared WeWork room, receiving an in-app message at the start of a Lime ride, or providing a photo at the end of a Zipcar rental may be considered an integral part of the service experience and not disruptive (and thus, not intrusive) to one's experience. In contrast, displaying otherwise superfluous in-app messages reminding customers to follow service rules, enforcing these rules by FLEs or peer providers in response to specific C2C misbehavior, or requiring customers to submit multiple pictures when using a shared resource, may be perceived as disruptive (and thus, intrusive) to one's experience. We generally expect anti-misbehavior measures to be more effective in curbing C2C misbehavior, the more intrusive they are. According to broken windows theory (Wilson & Kelling, 1982), more intrusive measures provide less ambiguous environmental cues, leaving less room for interpretation (Chaiken & Maheswaran, 1994) regarding platform or peer provider approval of C2C misbehavior and whether it is a social norm in a given sharing setting. Conversely, less intrusive measures may create ambiguity about acceptable behavior (Wilson & Kelling, 1982) and signal negligence in controlling such behavior, as suggested by attribution theory (Weiner, 2001), thus fueling provider-directed blame. Thus:

**H4a-d:** More intrusive anti-misbehavior measures reduce C2C misbehavior contagion in such a way that these measures attenuate the effect of other customers' C2C misbehavior severity on a) perceptions of social norms to misbehave, b) platform provider-directed blame attributions, c) peer provider-directed blame attributions, and d) C2C misbehavior.

**H4e:** More intrusive anti-misbehavior measures reduce C2C misbehavior contagion in such a way that these measures strengthen the effect of other customers' C2C misbehavior severity on perpetrator-directed blame attributions.

#### 4. Empirical studies

We conducted three online scenario experiments, covering the four sharing economy markets suggested by Perren and Kozinets (2018, see supplementary Tables A2 and A3). Study 1 tests our model in a platform-enabled B2C gym context, operating either a) with formal on-site supervision (Matchmaker market) or b) fully automated with no on-site supervision (Enabler market). This study investigates C2C misbehavior contagion (H1), contagion mechanisms (H2), and whether mediation depends on formal on-site supervision (H3). Study 2 examines contagion in a P2P carpooling context (Forum market) and tests the moderating role of informal on-site supervision in determining how contagion unfolds (H3) and peer-provider anti-misbehavior measure intrusiveness in curbing contagion (H4). Finally, Study 3 explores contagion in the context of a fully automated B2C co-working space (Hub market), testing the role of platform-provider anti-misbehavior measure intrusiveness in curbing contagion (H4).

#### 4.1. Study 1

Study 1 was pre-registered (<https://aspredicted.org/si94q.pdf>) and used an online scenario experiment in a platform-enabled gym context in which fitness facilities are shared. For a monthly fee, customers can temporarily access various local gyms, similar to popular sharing economy models, such as ClassPass or Urban Sports Club.

##### 4.1.1. Method and materials

539 Prolific.com respondents from the U.S. completed a 2 (other customers' C2C misbehavior severity: low vs. high) × 2 (on-site supervision: no supervision vs. formal on-site supervision) between-subjects design online experiment. To increase data quality, we used screeners (Arndt et al., 2022): we excluded respondents who failed two attention check questions and who sped through the survey (first 2.5 percentile of respondents), resulting in a final sample of 468 respondents (44.4 % female,  $M_{age} = 41.1$  years).

Respondents were asked to imagine being a member of a platform-enabled gym service that either operates unstaffed and fully automated (no supervision) or with gym staff (formal on-site supervision) (see Web Appendix C for all scenarios). They read about a gym customer who violated their personal boundaries, either by approaching them with friendly but unsolicited advice about their performance (low misbehavior severity) or by giving them unsolicited advice in an offensive manner (high misbehavior severity). In the "formal on-site supervision condition", respondents read that gym staff observes the gym member's behavior but did not act. After reading the scenario, respondents were asked to indicate their intention to engage in C2C misbehavior themselves, e.g., giving unsolicited advice to others, putting no towel on exercise machines (five items, 1 = extremely unlikely, 7 = extremely likely,  $\alpha = 0.71$ ),<sup>2</sup> their perceptions of social norms to misbehave at this gym (five items, e.g., "Other customers would not put a towel on exercise machines", 1 = extremely uncommon, 7 = extremely common, adapted from Schaefers et al., 2016,  $\alpha = 0.87$ ), how much they blame the platform provider for the misbehavior of the other customer (two items, 1 = not to blame at all, 7 = entirely to blame,  $\alpha = 0.73$ ), how much they blame the perpetrator (one item, 1 = not to blame at all, 7 = entirely to blame, Danatzis & Möller-Herm, 2023), their attitudes toward the platform provider (three items, e.g., 1 = very negative, 7 = very positive,  $\alpha = 0.97$ ; see Web Appendix B for results), and C2C misbehavior severity (four items, e.g., 1 = not at all severe, 7 = highly severe,  $\alpha = 0.78$ ). Next, as control variables, respondents rated how much they identified with other gym members (communal identification, adapted from Schaefers et al., 2016,  $\alpha = 0.91$ ), their tendency to respond in a socially desirable manner (Donovan et al., 2004), their prior experiences with gym visits with and without on-site supervision, their gender, and their age.

##### 4.1.2. Results

**Manipulation check.** In line with our experimental design, respondents evaluate other customers' C2C misbehavior severity differently ( $M_{Low} = 4.22$ ,  $SD = 1.23$ ,  $M_{High} = 5.36$ ,  $SD = 1.13$ ,  $F(1, 466) = 107.812$ ,  $p < .001$ ).

**C2C misbehavior contagion and contagion mechanisms.** We conducted a mediation analysis with other customers' C2C misbehavior severity as the independent variable, C2C misbehavior as the dependent variable, and three parallel mediators: perceptions of social norms to misbehave, platform-provider-directed blame attributions, and perpetrator-directed blame attributions. We further included our control variables and on-site supervision as covariates (PROCESS model 4, 10,000 bootstrap samples, and heteroscedasticity-consistent standard errors,<sup>3</sup> Hayes, 2017). This

<sup>2</sup> Details on the three studies' central measures are provided in the appendix.

<sup>3</sup> All studies were specified with 10,000 bootstrap samples and heteroscedasticity-consistent standard errors.



analysis allowed us to test both for a direct effect of C2C misbehavior severity on C2C misbehavior (H1) and for indirect effects (H2). Our results show no significant direct effect of C2C misbehavior severity on C2C misbehavior (H1;  $b = 0.05$ ,  $SE = 0.07$ ,  $p = .44$ ). Yet, we find support for H2a/b/d (see [supplementary Table A6](#)). There is a significant positive indirect effect of other customers' C2C misbehavior severity on C2C misbehavior mediated by perceptions of social norms to misbehave (H2a;  $b = 0.03$ ,  $SE_{boot} = 0.01$ ,  $CI\ 95\ [0.002; 0.057]$ ). Specifically, as previous C2C misbehavior severity increases, perceptions of social norms to misbehave increase ( $b = 0.25$ ,  $SE = 0.12$ ,  $p < .05$ ), which leads to more C2C misbehavior ( $b = 0.11$ ,  $SE = 0.02$ ,  $p < .001$ ). In line with H2b, we find a significant positive indirect effect of C2C misbehavior severity on C2C misbehavior mediated by platform-provider-directed blame attributions ( $b = 0.07$ ,  $SE_{boot} = 0.02$ ,  $CI\ 95\ [0.028; 0.120]$ ). The more severe customers judge other customer's C2C misbehavior to be, the higher the platform-provider-directed blame attributions ( $b = 0.81$ ,  $SE = 0.14$ ,  $p < .001$ ), which increase C2C misbehavior ( $b = 0.09$ ,  $SE = 0.03$ ,  $p < .001$ ). We further find a significant negative indirect effect via perpetrator-directed blame attributions (H2d;  $b = -0.04$ ,  $SE_{boot} = 0.02$ ,  $CI\ 95\ [-0.074; -0.005]$ ). While C2C misbehavior severity increases perpetrator-directed blame ( $b = 0.19$ ,  $SE = 0.09$ ,  $p < .05$ ), these blame attributions reduce C2C misbehavior ( $b = -0.20$ ,  $SE = 0.06$ ,  $p < .001$ ).

*The effect of formal on-site supervision on C2C misbehavior contagion.* We used a moderated mediation model (PROCESS model 8, [Hayes, 2017](#)) and specified perceptions of social norms to misbehave and platform-provider-directed blame attributions as the mediator variables and on-site supervision (no vs. formal on-site supervision) as the moderator. Results show that on-site supervision influences the mediation process that leads to C2C misbehavior (see [supplementary Figure A1 and Table A7](#)). In the absence of on-site supervision (Enabler market), we find a significant positive indirect effect of C2C misbehavior severity on C2C misbehavior mediated by perceptions of social norms to misbehave (H3a;  $b = 0.04$ ,  $SE_{boot} = 0.02$ ,  $CI\ 95\ [0.001; 0.081]$ ), but no mediation effect via platform-provider-directed blame attributions ( $b = 0.04$ ,  $SE_{boot} = 0.02$ ,  $CI\ 95\ [-0.001; 0.087]$ ). When formal on-site supervision is present (Matchmaker market), we find a significant positive indirect effect of C2C misbehavior severity on C2C misbehavior mediated by platform-provider-directed blame attributions (H3b;  $b = 0.12$ ,  $SE_{boot} = 0.04$ ,  $CI\ 95\ [0.053; 0.203]$ ), but no mediation effect via social norms ( $b = 0.02$ ,  $SE_{boot} = 0.02$ ,  $CI\ 95\ [-0.017; 0.061]$ ).

In summary, Study 1's findings reveal the moderating role of on-site supervision: blame attributions toward the platform provider drive C2C misbehavior contagion in settings with formal on-site supervision, while social norms underlie contagion when on-site supervision is absent. Perpetrator-directed blame attributions, in turn, reverse contagion, irrespective of supervision.

## 4.2. Study 2

Study 2 examines C2C misbehavior contagion in a P2P carpooling Forum setting that enables direct communication and coordination among platform users, mirroring industry examples like BlaBlaCar. We also examine the moderating role of *informal on-site supervision* and *peer provider anti-misbehavior measure intrusiveness* in curbing C2C contagion (H1-H4).

### 4.2.1. Method and materials

626 [Prolific.com](#) respondents from the U.S. completed a 2 (C2C misbehavior severity: low vs. high)  $\times$  2 (on-site supervision: no supervision vs. informal on-site supervision)  $\times$  3 (peer-provider measure intrusiveness: no/ active disregard vs. low/ in-person reprimand vs. high/ in-app message) between-subjects design online experiment. We used the same screeners as in Study 1, resulting in a final sample of 579 respondents (42.1 % female,  $M_{age} = 40.8$  years).

First, respondents were asked to imagine they needed a long-distance

car ride and turn to a P2P carpooling platform. They find a post by a peer who owns a car and agrees to serve as a driver and host four riders. In line with the platform's regulations, the peer who agrees to serve as the designated driver is responsible for the safety and comfort of everyone in the car (on-site supervision: informal on-site). Alternatively, respondents read that they do not find a ride offer, but team up with four other platform users, rent a car, and agree to share the driving and all other responsibilities (on-site supervision: no supervision). During the ride, one of the passengers begins to listen to music that is slightly noticeable to everyone in the car. The passenger starts moving with the music, which pushes some of the other passengers' luggage towards the edge (low misbehavior severity), or the passenger begins to listen to very loud music and starts moving heavily with the music, which pushes other passengers towards the edge of their seats (high misbehavior severity). As a response, either everyone actively disregards the issue (no measure intrusiveness), or the driver reprimands the perpetrator, requesting that they turn down the music and sit down quietly (low measure intrusiveness), or the driver manually sends an in-app push message to all passengers without distracting themselves from driving (high measure intrusiveness) that reads: "Please respect everyone on this ride and avoid disturbing behavior. Otherwise, you risk a negative rating on PeerRide and may be excluded from further use of the service!" In all experimental conditions, the passenger stops misbehaving after listening to another song. Eventually, the car arrives at the first stop, and the perpetrator and another passenger who both had a different destination leave the car. The remaining passengers continue the journey together for another two hours.

After reading the scenario, we collected ratings using the same scales as in Study 1. First, respondents were asked to indicate their intention to engage in C2C misbehavior themselves during the rest of the journey, e.g., rest your feet on another passenger's luggage (six items,  $\alpha = 0.86$ ). Next, respondents rated their perceptions of social norms to misbehave in rideshares organized through this carpooling platform (six items, e.g., "Other customers would rest their feet on another passenger's luggage",  $\alpha = 0.89$ ), how much they blame the platform provider (i.e., the carpooling platform) and the driver (i.e., the peer provider) for the incivility of the passenger (one item each), how much they blame the perpetrator (one item), their attitudes toward the platform provider (three items,  $\alpha = 0.96$ ; see [Web Appendix B](#) for results), C2C misbehavior severity (four items,  $\alpha = 0.83$ ), and peer-provider measure intrusiveness (one item, 1 = not intrusive at all, 7 = highly not intrusive). Next, we collected the same control variables as in Study 1: communal identification ( $\alpha = 0.90$ ), the tendency to respond in a socially desirable manner, their prior experiences with carpooling services, their gender, and their age.

### 4.2.2. Results

*Manipulation checks.* In line with our experimental design, respondents' evaluations differ regarding other customers' C2C misbehavior severity ( $M_{Low} = 3.49$ ,  $SD = 1.21$ ,  $M_{High} = 5.11$ ,  $SD = 1.09$ ,  $F(1, 577) = 288.44$ ,  $p < .001$ ), and peer-provider measure intrusiveness ( $M_{No} = 3.82$ ,  $SD = 1.15$ ,  $M_{Low} = 4.55$ ,  $SD = 1.29$ ,  $M_{High} = 5.13$ ,  $SD = 1.38$ ,  $F(2, 576) = 52.04$ ,  $p < .001$ , all pairwise comparisons:  $p < .001$ ). We controlled for memory about on-site supervision with one question and excluded respondents who failed this attention check.

*C2C misbehavior contagion and contagion mechanisms.* Our analysis parallels Study 1. First, we examined C2C misbehavior contagion and the contagion mechanisms (H1, H2) and ran a mediation analysis (PROCESS model 4, [Hayes, 2017](#)) as described in Study 1, but with peer-provider-directed blame attributions as a fourth mediator and peer-provider measure intrusiveness as an additional covariate. In support of H1, Study 2 results show a direct effect of C2C misbehavior severity on C2C misbehavior ( $b = 0.10$ ,  $SE = 0.04$ ,  $p < .05$ ). We also find a significant positive indirect effect of C2C misbehavior severity on C2C misbehavior mediated by perceptions of social norms to misbehave (H2a;  $b = 0.02$ ,  $SE_{boot} = 0.01$ ,  $CI\ 95\ [0.001; 0.049]$ ). Mirroring Study 1's

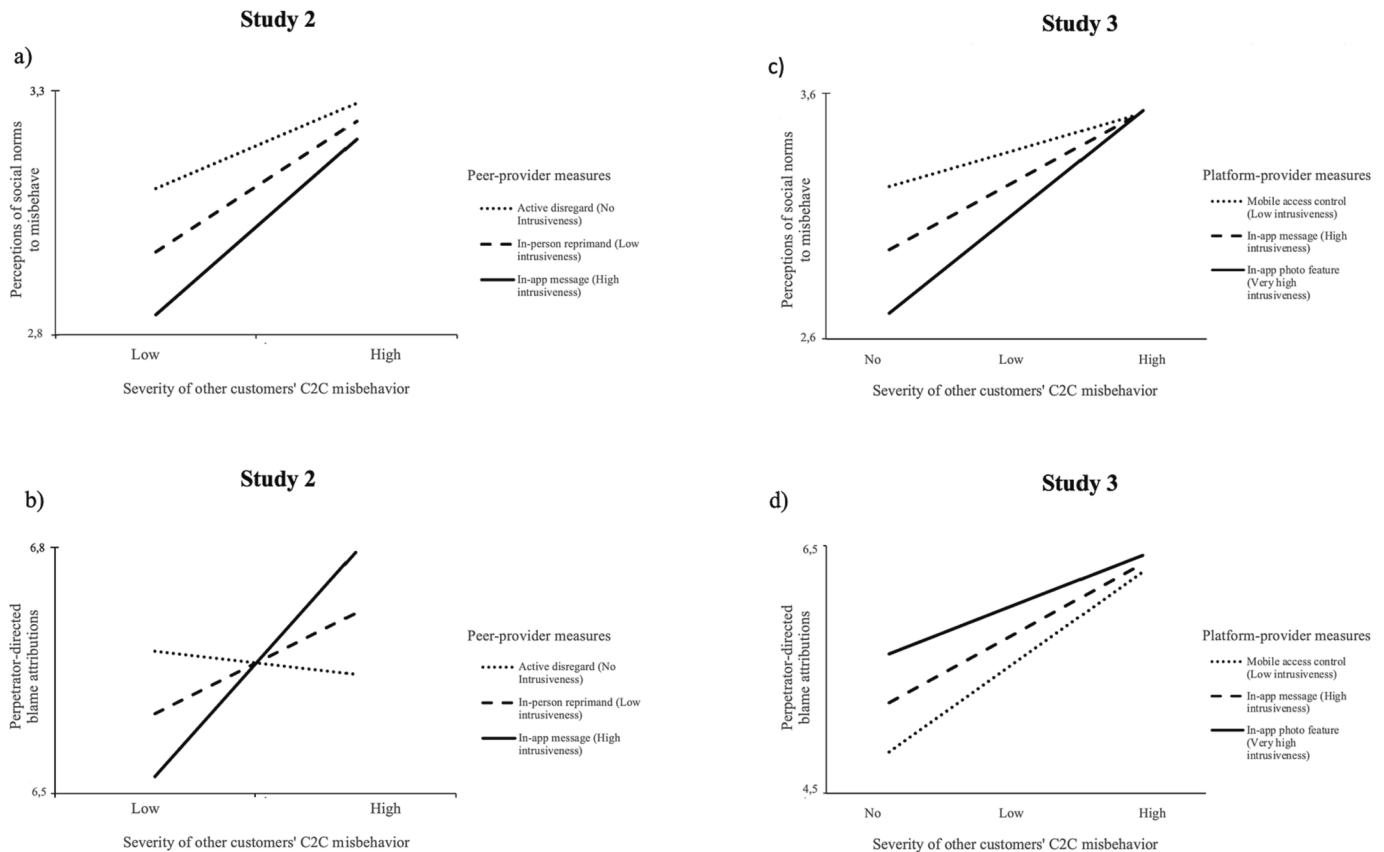
mediation effects, the more severe the prior C2C misbehavior, the higher the perceptions of social norms to misbehave ( $b = 0.22$ ,  $SE = 0.10$ ,  $p < .05$ ), which increases C2C misbehavior ( $b = 0.10$ ,  $SE = 0.02$ ,  $p < .001$ ). Results also show a significant negative indirect effect of C2C misbehavior severity on C2C misbehavior mediated via perpetrator-directed blame attributions (H2d;  $b = -0.02$ ,  $SE_{boot} = 0.01$ ,  $CI\ 95 [-0.044; -0.003]$ ). As expected, while C2C misbehavior severity increases perpetrator-directed blame attributions ( $b = 0.16$ ,  $SE = 0.07$ ,  $p < .05$ ), these perpetrator-directed blame attributions reduce C2C misbehavior ( $b = -0.14$ ,  $SE = 0.05$ ,  $p < .01$ ). Lastly, neither platform-provider-directed blame attributions (H2b), nor peer-provider-directed blame attributions (H2c) mediate the effect of C2C misbehavior severity on C2C misbehavior (see [supplementary Table A10](#)).

**The effect of informal on-site supervision on C2C misbehavior contagion.** We used a moderated mediation model (PROCESS model 8, Hayes, 2017) and, in contrast to the model described above, removed perpetrator-directed blame attributions as a mediator and specified on-site supervision (no supervision vs. informal on-site) as the moderator. Study 2 findings show that informal on-site supervision influences the mediation process that leads to C2C misbehavior. Comparable to Study 1's findings, without on-site supervision, we find a significant positive indirect effect of C2C misbehavior severity on C2C misbehavior mediated by social norms to misbehave (H3a;  $b = 0.03$ ,  $SE_{boot} = 0.01$ ,  $CI\ 95 [0.004; 0.061]$ ), but social norms do not serve as a mediator in settings with informal on-site supervision ( $b = 0.02$ ,  $SE_{boot} = 0.01$ ,  $CI\ 95 [-0.006; 0.047]$ ). Regarding mediation mechanisms via platform-provider-directed and peer-provider-directed blame attributions (H3b, H3c), independent of on-site supervision, we find no significant mediation effects (see [supplementary Table A11](#)).

**The effect of peer-provider measure intrusiveness on C2C misbehavior contagion.** We tested H4a – H4e with a moderated mediation model

(PROCESS model 8, Hayes, 2017). Compared to the model described above, peer-provider measure intrusiveness (no: active disregard vs. low: in-person reprimand vs. high: in-app message) was specified as the moderator. First, results show that measure intrusiveness influences the mediation process that leads to C2C misbehavior. For in-person reprimands (low measure intrusiveness;  $b = 0.02$ ,  $SE_{boot} = 0.01$ ,  $CI\ 95 [0.005; 0.047]$ ) and in-app messages (high measure intrusiveness;  $b = 0.03$ ,  $SE_{boot} = 0.02$ ,  $CI\ 95 [0.003; 0.066]$ ) we find a significant positive indirect effect of C2C misbehavior severity on C2C misbehavior mediated by social norms to misbehave (H4a), but social norms do not serve as a mediator if peer providers exhibit active disregard (no measure intrusiveness;  $b = 0.02$ ,  $SE_{boot} = 0.01$ ,  $CI\ 95 [-0.011; 0.048]$ ). A closer look at these results (Fig. 3a) shows that at low-severity instances of C2C misbehavior, more intrusive measures (in-app messages) lead to lower perceptions of social norms to misbehave as compared to less intrusive measures (active disregard, in-person reprimands). Yet, at high-severity C2C misbehavior instances, social norms to misbehave do not differ at different levels of measure intrusiveness. Since social norm perceptions significantly increase C2C misbehavior ( $b = 0.08$ ,  $SE = 0.02$ ,  $p < .001$ ), more intrusive measures mitigate contagion at low-severity misbehavior levels.

Next, results show that the mediation effect via perpetrator-directed blame attributions is also dependent on measure intrusiveness (H4e). We find a significant negative indirect effect of C2C misbehavior severity on C2C misbehavior mediated via perpetrator-directed blame for in-app messages (high measure intrusiveness;  $b = -0.03$ ,  $SE_{boot} = 0.02$ ,  $CI\ 95 [-0.064; -0.002]$ ), but no significant mediation for in-person reprimands and active disregard (low and no measure intrusiveness; see [supplementary Table A12](#)). Apparently, at low levels of C2C misbehavior severity, more intrusive measures reduce blame attributions toward the perpetrator as compared to less intrusive



**Fig. 3.** The influence of anti-misbehavior measure intrusiveness on the effect of other customers' C2C misbehavior severity on perceptions of social norms to misbehave and on perpetrator-directed blame attributions (Study 2 and Study 3).

measures. However, at high levels of C2C misbehavior severity, perpetrator-directed blame attributions are highest for highly intrusive in-app messages. Since blame attributions toward the perpetrator significantly decrease C2C misbehavior ( $b = -0.11$ ,  $SE = 0.05$ ,  $p < .05$ ), in-app messages mitigate contagion for high-severity C2C misbehavior (Fig. 3b). Finally, we find neither significant mediation effects via platform-provider-directed blame attributions (H4b) nor via peer-provider-directed blame attributions (H4c), regardless of measure intrusiveness, nor an effect of measure intrusiveness on the direct path from C2C misbehavior severity to C2C misbehavior (H4d;  $b = 0.007$ ,  $SE = 0.04$ ,  $p = .862$ ).

Overall, our findings show that in sharing economy markets with informal on-site supervision, C2C misbehavior spreads because of increased perceptions of social norms to misbehave (and not because of peer-provider-directed or platform-provider-directed blame attributions). More intrusive peer-provider measures can further curb contagion for high-severity C2C misbehavior because of lower perceptions of social norms to misbehave and a blame shift toward the perpetrator.

### 4.3. Study 3

Study 3 investigates C2C misbehavior contagion in a fully automated, unstaffed B2C co-working Hub setting *without any on-site supervision* (H1, H2). We focus on the effectiveness of smartphone-based *platform-provider measures* and test whether perceptions of their *intrusiveness* influence C2C misbehavior contagion and its underlying mechanisms (H4).

#### 4.3.1. Method and materials

875 Prolific.com respondents from the U.S. completed a 3 (other customers' C2C misbehavior severity: no vs. low vs. high)  $\times$  3 (platform-provider measure intrusiveness: low/ mobile access control vs. high/ in-app messages vs. very high/ in-app photo feature) between-subjects design online experiment. We used the same screeners as in Studies 1 and 2, resulting in a final sample of 843 respondents (43.8 % female,  $M_{age} = 40.2$  years).

First, we asked respondents to imagine they visited a fully automated co-working space named "ImpactWork" which operates without any on-site staff. Respondents read that they booked a private workspace room to take confidential client calls. Their workspace room had been previously used by other customers that day. We manipulated *other customers' C2C misbehavior severity* by the description of the room's level of cleanliness. Respondents either read that upon entering the room, they quickly glance around and see that everything looks clean (no misbehavior severity), or they notice that there are some shredded paper pieces and candy wrappers on the floor next to the recycling bin (low misbehavior severity). Alternatively, they notice an overflowing recycling bin with papers scattered on the floor, a half-open pizza box on top of the recycling bin, and a slice of pizza and some used paper napkins on the floor next to it (high misbehavior severity).

We manipulated the level of *platform-provider measure intrusiveness* based on the extent to which the measures interrupted the flow of the customer's service experience when accessing the workspace facilities. Specifically, respondents read they had to use the "ImpactWork" app to scan a QR code on the door lock to enter the workspace. After finishing their calls, they had to use the app again to end the session, and the door locked behind them after they left the room (measure intrusiveness: low – mobile access control). Alternatively, respondents read that when accessing the room, they receive the following in-app message: "Please be considerate of other ImpactWork customers and keep the workspace room clean". After a short while, the message disappears, the door opens, and they can enter the room. After they finish their calls and end the session using the app, yet another in-app message appears: "Thank you for keeping this workspace room clean". A few seconds later, the message disappears, they leave the room, and the door locks behind them (measure intrusiveness: high – in-app messages). Or respondents

read that "ImpactWork" requires its customers to take multiple photos from specified locations of the workspace when accessing it through their mobile app. Specifically, after accessing the room using the "ImpactWork" app, customers are requested to use their smartphone camera to take several pictures of the room from clearly marked spots. These pictures are subsequently uploaded and submitted automatically through the app. At the end of their session, they are required again to take and submit multiple pictures of the room from the same spots. Once the pictures are uploaded and submitted via the "ImpactWork" app, they can exit the room, and the door locks behind them (measure intrusiveness: very high – in-app photo feature).

After reading the scenario, we collected ratings using the same scales as in our previous studies. First, respondents indicated how likely they were to engage in C2C misbehavior while using the workspace, e.g., throw some of your paper waste on the floor (five items,  $\alpha = 0.85$ ). Next, respondents indicated their attitudes toward the platform provider (three items,  $\alpha = 0.99$ ), answered how much they blame the platform provider for other customers' misbehavior (one item), and how much they blame the perpetrator for the room's condition (one item). Next, they rated their perceptions of social norms to misbehave at this shared workspace (5 items, e.g., other customers would throw their paper waste on the floor,  $\alpha = 0.89$ ), the platform-provider measure intrusiveness (one item), and C2C misbehavior severity (four items,  $\alpha = 0.85$ ). Finally, as control variables, respondents indicated their need for orderliness (three items, e.g., I like to tidy up,  $\alpha = 0.69$ , Johnson, 2014), trait reactance (three items, e.g., regulations trigger a sense of resistance in me,  $\alpha = 0.84$ , adapted from Faedda and Hong, 1996), perceptions of the platform provider's trust toward its customers (two items, e.g., ImpactWork trusts its customers to behave properly in the workspace rooms,  $\alpha = 0.95$ ), communal identification ( $\alpha = 0.91$ ), the tendency to respond in a socially desirable manner, their prior experiences with a co-working space service, their gender, and their age.

#### 4.3.2. Results

**Manipulation check.** Respondents rated other customers' C2C misbehavior severity ( $M_{No} = 2.59$ ,  $SD = 1.37$ ,  $M_{Low} = 3.85$ ,  $SD = 1.17$ ,  $M_{High} = 5.21$ ,  $SD = 1.05$ ,  $F(2, 840) = 327.54$ ,  $p < .001$ , all pairwise comparisons:  $p < .001$ ) and the intrusiveness of platform-provider measures ( $M_{Low} = 3.05$ ,  $SD = 1.11$ ,  $M_{Medium} = 3.58$ ,  $SD = 1.06$ ,  $M_{High} = 4.22$ ,  $SD = 0.86$ ,  $F(2, 840) = 94.18$ ,  $p < .001$ , all pairwise comparisons:  $p < .001$ ) in line with our intended manipulations.

**C2C misbehavior contagion and contagion mechanisms.** Our analysis mirrored Study 1. We conducted a mediation analysis (PROCESS model 4, Hayes, 2017) with the same variables but with anti-misbehavior measure intrusiveness instead of on-site supervision and need for orderliness, trait reactance, and perceptions of the platform provider's trust toward its customers as additional covariates. Study 3 results show a direct effect of C2C misbehavior severity on C2C misbehavior (H1;  $b = 0.12$ ,  $SE = 0.03$ ,  $p < .001$ ). Further, we find support for H2a. There is a significant positive indirect effect of C2C misbehavior severity on C2C misbehavior mediated by perceptions of social norms to misbehave ( $b = 0.05$ ,  $SE_{boot} = 0.01$ ,  $CI_{95} [0.031; 0.075]$ ; see supplementary Table A15). Specifically, the main effect of C2C misbehavior severity on perceptions of social norms to misbehave is positive and significant ( $b = 0.28$ ,  $SE = 0.05$ ,  $p < .001$ ) as is the main effect of social norm perceptions on C2C misbehavior ( $b = 0.18$ ,  $SE = 0.02$ ,  $p < .001$ ). Further, we find a significant negative indirect effect of C2C misbehavior severity on C2C misbehavior mediated via perpetrator-directed blame attributions (H2d;  $b = -0.02$ ,  $SE_{boot} = 0.01$ ,  $CI_{95} [-0.049; -0.001]$ ). As shown in our previous studies, C2C misbehavior severity increases perpetrator-directed blame attributions ( $b = 0.56$ ,  $SE = 0.06$ ,  $p < .001$ ), which, in turn, reduces C2C misbehavior ( $b = -0.04$ ,  $SE = 0.02$ ,  $p = .05$ ). Lastly, provider-directed blame attributions do not mediate the effect of C2C misbehavior severity on C2C misbehavior (H2b;  $b = 0.004$ ,  $SE_{boot} = 0.01$ ,  $CI_{95} [-0.001; 0.011]$ ). This effect is in line with our reasoning that mediation via provider-directed blame attributions does not occur

in settings without on-site supervision.

The effect of platform-provider measure intrusiveness on C2C misbehavior contagion. We tested H4 with a moderated mediation model (PROCESS model 8, Hayes, 2017). In addition to the model described above, platform-provider measure intrusiveness was included as the moderator. First, results indicate that measure intrusiveness influences the mediation process that leads to C2C misbehavior. We find that the positive indirect effect of C2C misbehavior severity on C2C misbehavior mediated by social norms perceptions increases with increasing levels of measure intrusiveness (H4a;  $b_{Low} = 0.03$ ,  $SE_{boot} = 0.01$ , CI 95 [0.001; 0.056],  $b_{High} = 0.05$ ,  $SE_{boot} = 0.01$ , CI 95 [0.030; 0.075],  $b_{Very\ high} = 0.07$ ,  $SE_{boot} = 0.02$ , CI 95 [0.042; 0.112]). Mirroring Study 2 findings, a closer look at these results shows that at low levels of C2C misbehavior severity, more intrusive measures (in-app messages, in-app photo feature) lead to lower perceptions of social norms to misbehave as compared to less intrusive measures (mobile access control). However, at high levels of C2C misbehavior severity, the perceptions of social norms to misbehave do not differ along different levels of measure intrusiveness (Fig. 3c). Since perceptions of social norms to misbehave significantly increase C2C misbehavior ( $b = 0.18$ ,  $SE = 0.02$ ,  $p < .001$ ), platform-provider measures with higher levels of intrusiveness mitigate C2C misbehavior contagion at low levels of other customer's C2C misbehavior severity.

Second, results show that the mediation effect via perpetrator-directed blame attributions depends on measure intrusiveness (H4e). Specifically, we find that the significant negative indirect effect of other customers' C2C misbehavior severity on C2C misbehavior mediated via perpetrator-directed blame attributions decreases with increasing levels of measure intrusiveness (H4e;  $b_{Low} = -0.03$ ,  $SE_{boot} = 0.02$ , CI 95 [-0.067; -0.001],  $b_{High} = -0.02$ ,  $SE_{boot} = 0.01$ , CI 95 [-0.050; -0.001],  $b_{Very\ high} = -0.02$ ,  $SE_{boot} = 0.01$ , CI 95 [-0.037; -0.001]). Fig. 3d shows that at low-severity misbehavior instances, more intrusive measures (in-app messages and photo features) lead to increased perpetrator-directed blame attributions as compared to less intrusive measures (mobile access control). Yet, at high-severity misbehavior instances, blame attributions do not differ along different levels of measure intrusiveness. Since blame attributions toward the perpetrator reduce C2C misbehavior ( $b = -0.04$ ,  $SE = 0.02$ ,  $p = .05$ ), highly intrusive measures mitigate C2C misbehavior contagion at low-severity misbehavior instances. Third, we do not find significant mediation effects via platform-provider-directed blame attributions (H4b) at no level of measure intrusiveness (see supplementary Table A16), nor an effect of measure intrusiveness on the direct path from C2C misbehavior severity on C2C misbehavior (H4d;  $b = -0.001$ ,  $SE = 0.04$ ,  $p = .981$ ).

## 5. Discussion

The sharing economy has radically reshaped how we work, shop, move, and travel, bringing numerous benefits but also fostering environments in which C2C misbehavior can spread. The reasons for this contagion effect, however, and potential containment measures across sharing economy markets have remained largely unclear. Our three experiments reveal that platform-directed blame attributions drive contagion in settings with formal on-site supervision, while social norms underlie contagion when supervision is absent. Perpetrator-directed blame attributions, in turn, reverse contagion regardless of supervision. More intrusive measures, such as in-person reprimands and photo features, effectively curb contagion, yet their effectiveness varies for different levels of misbehavior severity for different sharing economy market types.

### 5.1. Theoretical contributions

Theoretically, this research makes three key contributions: First, this paper is the first to provide experimental evidence of C2C misbehavior contagion across all four sharing economy market types proposed by

Perren and Kozinets (2018). To the best of our knowledge, only three studies provide quantitative evidence that C2C misbehavior can be contagious in a sharing economy context, yet all focus on B2C access-based services such as car-sharing (Schaefers et al., 2016), bike-sharing (Srivastava et al., 2022), and co-working services (Danatzis & Möller-Herm, 2023). We critically complement these studies by providing empirical support of the contagion effect for both direct (i.e., personal boundary violations, noise) and indirect forms (i.e., littering) of C2C misbehavior across B2C and P2P sharing economy markets that inherently differ in their consociality and platform intermediation. Such a nuanced approach is crucial, as C2C misbehavior pervades all sharing economy markets, negatively affecting customers, peer providers, and platform providers. Gaining in-depth insights into its spread across these four markets is therefore vital for devising effective containment measures. Our findings across all three studies also empirically support a key assumption in broken windows theory that has rarely been tested: that one disorder (e.g., noise) fosters new disorders (e.g., littering, theft) (Keizer et al., 2008; Wilson & Kelling, 1982).

Second, this paper offers a fine-grained understanding of the psychological mechanisms underlying C2C misbehavior contagion across sharing economy markets. Findings across all three studies suggest that the level of on-site supervision critically determines whether social norms or provider-directed blame attributions drive contagion. Although both mechanisms have been previously identified as contagion drivers (Danatzis & Möller-Herm, 2023; Schaefers et al., 2016; Srivastava et al., 2022), our research is the first to manipulate the presence or absence of either formal (Study 1) or informal (Study 2) on-site supervision. Specifically, Study 1 explicates the moderating role of on-site supervision, with blame attributions toward the platform provider driving C2C misbehavior in settings with formal on-site supervision and social norms fueling contagion when supervision is absent. Evidence across all three studies further shows that perpetrator-directed blame attributions slow down and even reverse contagion, regardless of on-site supervision. These conditional contagion mechanisms hold for direct and indirect forms of C2C misbehavior. By delineating the crucial role on-site supervision plays in determining how contagion unfolds (rather than the way customers are targeted; Schaefers et al., 2016), our research clarifies the boundaries, relevance, and primacy of its underlying mechanisms.

Third, this paper is the first to show what measures platform- and peer providers can readily employ to effectively curb the spread of C2C misbehavior. Specifically, Study 2's findings reveal that more intrusive peer provider measures, such as in-person reprimands and in-app messages, are most effective in curbing contagion in high-consociality markets (i.e., P2P Forums). Similarly, Study 3 findings show that more intrusive platform provider measures such as in-app messages and in-app photo features significantly reduce social norms to misbehave and subsequent contagion in markets with high platform intermediation (i.e., B2C Hubs). Notably, the findings of both Study 2 and Study 3 show that these measures are effective in curbing contagion only when other customers' C2C misbehavior is absent or of low severity, yet they become ineffective for high-severity instances of C2C misbehavior. Moreover, Study 2 and Study 3 findings reveal that more intrusive measures also curb contagion by shifting blame to the perpetrator for low-severity misbehavior instances in Hub markets and for high-severity instances in Forum markets. While blame-shifting has been proposed previously as an alternative pathway to curb contagion (Danatzis & Möller-Herm, 2023), this study is the first to provide empirical evidence for this effect. Our findings further stress the importance of smartphone-based measures and peer provider involvement in curbing contagion, two areas that have received limited academic attention despite widespread industry use. Overall, these findings critically expand the so far limited empirical work on curbing C2C misbehavior contagion in the sharing economy beyond FLE interventions (Danatzis & Möller-Herm, 2023) or long-term strategies such as brand- or identity-building measures (Schaefers et al., 2016; Srivastava et al., 2022).

## 5.2. Managerial implications

From a managerial perspective, our research has several important implications.

In general, sharing economy firms should take C2C misbehavior seriously. While its implications might be less obvious than misbehavior directed at the firm or its FLEs, our findings provide evidence that such behavior is contagious across all four sharing economy market types—Forums, Matchmakers, Hubs, and Enablers—proposed by Perren and Kozinets (2018). Often starting with one seemingly isolated transgression, C2C misbehavior may spread as other customers also engage in such behavior. However, firms are not helpless, and this paper provides clear and actionable guidance on what sharing economy firms should do when confronted with C2C misbehavior, which measures they should prioritize across different markets, and what they should refrain from doing to tackle its spread.

Specifically, results across all three studies show that on-site supervision exercised either formally by platform FLEs in B2C platforms or informally by peer providers in P2P platforms is insufficient to prevent contagion. C2C misbehavior spreads, albeit for different reasons, in all sharing economy markets, regardless of their level of consociality or platform intermediation and whether platform FLEs or peer providers are present or absent.

For sharing economy markets with *high consociality*, such as Forums (e.g., Carpool World, BlaBlaCar, Freecycle) or Matchmakers (e.g., Airbnb, Uber, WeWork), Study 2's findings suggest that platforms should use anti-misbehavior measures that are perceived as intrusive or interruptive of the service experience to curb contagion by reducing perceptions of social norms to misbehave. Specifically, we advise FLEs or peer providers to leverage their interpersonal control in these markets and reprimand perpetrators either in person or remotely by manually sending in-app push messages when deemed appropriate. Unexpectedly, the results of Study 2 recommend prioritizing remote-controlled in-app messages over in-person reprimands, as these messages are perceived as more intrusive and more effective in reducing contagion. Yet, these measures are ineffective for high-severity instances of C2C misbehavior. Forums and Matchmakers, therefore, should encourage their FLEs or peer providers to visibly interrupt perpetrators immediately, no matter how minor the misbehavior.

For sharing economy markets with *high platform intermediation*, in turn, such as Hubs (e.g., Zipcar, Lime, HomeBase Share), or Matchmakers (e.g., Airbnb, Uber, WeWork), Study 3 findings suggest that platforms should invest in state-of-the-art, smartphone-based measures to leverage the capabilities of their technology platform to curb the spread of C2C misbehavior. Specifically, our results indicate that in-app messages and in-app photo features are most effective at curbing contagion by reducing social norms to misbehave. Again, Hubs and Matchmakers should prioritize more intrusive measures, such as in-app photo features that require customers to submit multiple pictures when using a shared resource (e.g., a Lime scooter, an Airbnb rental, a WeWork space) to effectively reduce perceptions of social norms to misbehave. Both in-app messages and in-app photo features, however, only work to curb C2C misbehavior in the absence of previous misbehavior or if such misbehavior is deemed to be of low severity. For high-severity instances, Study 3's findings (as with Study 2's findings) show that all tested anti-misbehavior measures render ineffective. We, therefore, recommend Hubs and Matchmakers—whenever possible—to regularly monitor the state of shared resources and remove severe signs of previous misbehavior by, for example, increasing the cleaning frequency of shared facilities or by regularly checking the proper functioning of shared equipment, cars, or e-scooters.

Finally, findings from all three studies show that perpetrator-directed blame attributions reverse C2C misbehavior contagion in Forums, Enabler, Hubs, and Matchmaker markets. The findings of Study 2 and Study 3 further suggest that more intrusive anti-misbehavior measures, such as in-app messages and in-app photo features, are effective

not only in reducing perceptions of social norms to misbehave but also in *reversing* contagion by shifting blame to the perpetrator. This holds for low-severity misbehavior instances in Hub markets and high-severity misbehavior instances in Forum markets. We, therefore, recommend Forums and Hubs to strengthen this blame-shifting effect by incorporating explicit appeals that call attention to the perpetrators' misbehavior, thereby increasing perpetrator blame and reversing contagion. For example, in-app messages could stress the perpetrators' culpability for the misbehavior, rather than just reminding customers of the service rules (e.g., "Please report any littering by other customers. We don't tolerate such behavior, and neither should you!").

## 5.3. Limitations and future research directions

We acknowledge several limitations that may encourage future research.

First, our research relies on three fictional online scenario experiments which inherently limit the external validity of our findings. To enhance the generalizability and applicability of our results, future research could conduct field studies to replicate our findings in real-world settings and observe actual C2C misbehavior contagion vis-a-vis anti-misbehavior measures.

Second, this paper provides initial evidence that smartphone-based measures effectively curb C2C misbehavior in markets with high consociality or high platform intermediation when customers encounter no signs of prior misbehavior or when previous misbehavior is of low severity. Yet, more research is needed to explore how platform and peer providers can address high-severity instances of C2C misbehavior and examine the potential of other technology-mediated or social measures, beyond FLE interventions (Danatzis & Möller-Herm, 2023). For example, future studies could investigate the effectiveness of personalized interventions by service robots (Van Doorn et al., 2017) or AI-powered measures that adapt to the encountered severity of C2C misbehavior as potential alternatives to in-app messages and photo features. Our study also focuses on measures that interrupt the flow of the service experience. However, future research could examine the effectiveness of non-disruptive trust-building measures, such as customer reviews, third-party ID verification, insurance, and legal mechanisms (e.g., warranties, guarantees) in curbing contagion. These measures may be of particular interest for Enabler markets, characterized by both low consociality and low platform intermediation, but for which evidence is still lacking.

Third, our findings show that more intrusive measures (e.g., in-app messages and photo features) are more effective in curbing contagion than less intrusive measures (e.g., in-person reprimands, mobile access control). Yet, previous research suggests that excessive feelings of intrusion may provoke an adverse cognitive reaction to those measures (Bonfanti, 2016) by compromising customers' sense of being welcome in a service environment, for example, and raising doubts about the adequacy of security and safety standards (Goh & Law, 2007) or the frequency of misbehavior in a service setting (Feickert et al., 2006). It would be highly relevant, therefore, to explore the circumstances that may cause adverse reactions and even accelerate contagion. Relatedly, longitudinal studies could explore (unintended) long-term effects, such as whether repeated exposure to in-app messages increases message fatigue (Guan et al., 2023) which may reduce their efficacy in curbing contagion.

Fourth, the in-app messages in Study 2 and Study 3 featured fear statements (Orazi & Pizzetti, 2015) and statements promoting a sense of community (Schaefers et al., 2016). Future research could investigate the potential of both negative and positive emotional appeals in increasing (or attenuating) the effectiveness of in-app messages (or in-person reprimands) in curbing C2C misbehavior contagion across sharing economy markets. For instance, previous research suggests that trust-signaling messages (Macintosh & Stevens, 2013) or those evoking moral emotions, such as shame, guilt, or pride, are particularly effective

in preventing customer misbehavior (Coleman et al., 2020; Fombelle et al., 2020).

Finally, our findings emphasize the central role blame attributions play in driving C2C misbehavior contagion. However, in some sharing economy settings, customers access shared resources from multiple service providers (e.g., ClassPass) with regular “offline” customers who may be more familiar with service rules and less prone to C2C misbehavior. Future research could explore blame attributions in these settings, as well as the impact of more affective contagion mechanisms, such as emotional contagion (Hennig-Thurau et al., 2006) in high consociality Forum or Matchmaker markets, and contamination concerns (Hazée et al., 2019) in markets with low consociality such as Hubs and Enablers.

#### CRedit authorship contribution statement

**Ilias Danatzis:** Writing – original draft, Visualization, Supervision, Investigation, Conceptualization. **Jana Möller-Herm:** Writing – original draft, Methodology, Formal analysis, Conceptualization. **Steffen Herm:** Resources, Methodology, Formal analysis.

#### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

#### Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.jbusres.2023.114460>.

#### References

- Airbnb. (2022). *New Safety Product for Solo Travelers*. <https://news.airbnb.com/new-safety-product-for-solo-travelers/>.
- Arndt, A. D., Ford, J. B., Babin, B. J., & Luong, V. (2022). Collecting Samples from Online Services: How to Use Screeners to Improve Data Quality. *International Journal of Research in Marketing*, 39(1), 117–133.
- Baker, M. A., & Kim, K. (2018). Other Customer Service Failures: Emotions, Impacts, and Attributions. *Journal of Hospitality and Tourism Research*, 42(7), 1067–1085.
- Bardhi, F., & Eckhardt, G. M. (2012). Access-Based Consumption: The Case of Car Sharing. *Journal of Consumer Research*, 39(4), 881–898.
- Benoit, S., Baker, T. L., Bolton, R. N., Gruber, T., & Kandampully, J. (2017). A Triadic Framework for Collaborative Consumption (CC): Motives, Activities and Resources & Capabilities of Actors. *Journal of Business Research*, 79, 219–227.
- Bitner, M. J., Booms, B. H., & Mohr, L. A. (1994). Critical Service Encounters: The Employee's Viewpoint. *Journal of Marketing*, 58(4), 95.
- Bonfanti, A. (2016). Customers' Needs and Expectations on Servicescape Surveillance Management. *TQM Journal*, 28(6), 887–906.
- Carville, O. (2021). Airbnb is Spending Millions of Dollars to Make Nightmares Go Away. *Bloomberg UK*.
- Chaiken, S., & Maheswaran, D. (1994). Heuristic Processing Can Bias Systematic Processing: Effects of Source Credibility, Argument Ambiguity, and Task Importance on Attitude Judgment. *Journal of Personality and Social Psychology*, 66(3), 460–473.
- Chaurand, N., & Brauer, M. (2008). What determines social control? People's reactions to counternormative behaviors in urban environments. *Journal of Applied Social Psychology*, 38(7), 1689–1715.
- Coleman, J. T., Royne, M. B., & Pounders, K. R. (2020). Pride, Guilt, and Self-Regulation in Cause-Related Marketing Advertisements. *Journal of Advertising*, 49(1), 34–60.
- Danatzis, I., & Möller-Herm, J. (2023). Stopping the Spread: How Blame Attributions Drive Customer-to-Customer Misbehavior Contagion and What Frontline Employees Can Do to Curb It. *Journal of Service Research*, 26(3), 459–475.
- Donavan, D. T., Brown, T. J., & Mowen, J. C. (2004). Internal Benefits of Service-Worker Customer Orientation: Job Satisfaction, Commitment, and Organizational Citizenship Behaviors. *Journal of Marketing*, 68(1), 128–146.
- Eckhardt, G. M., Houston, M. B., Jiang, B., Lambertson, C., Rindfleisch, A., & Zervas, G. (2019). Marketing in the Sharing Economy. *Journal of Marketing*, 83(5), 5–27.
- Edwards, S. M., Li, H., & Lee, J. H. (2002). Forced Exposure and Psychological Reactance: Antecedents and Consequences of the Perceived Intrusiveness of Pop-Up Ads. *Journal of Advertising*, 31(3), 83–95.
- Faedda, S., & Hong, S. (1996). *Refinement of the Hong Psychological Reactance Scale*. In Educational and Psychological Measurement.
- Feickert, J., Verma, R., Plaschka, G., & Dev, C. S. (2006). Safeguarding your Customers: The Guest's View of Hotel Security. *Cornell Hotel and Restaurant Administration Quarterly*, 47(3), 224–244.
- Fisk, R., Grove, S., Harris, L. C., Keeffe, D. A., Daunt, K. L., Russell-Bennett, R., & Wirtz, J. (2010). Customers Behaving Badly: A State of the Art Review, Research Agenda and Implications for Practitioners. *Journal of Services Marketing*, 24(6), 417–429.
- Fombelle, P. W., Voorhees, C. M., Jenkins, M. R., Sidaoui, K., Benoit, S., Gruber, T., Gustafsson, A., & Abosag, I. (2020). Customer Deviance: A Framework, Prevention Strategies, and Opportunities for Future Research. *Journal of Business Research*, 116 (August), 387–400.
- FreeNow. *Multi-Mobility Safety Month: FREE NOW Safety and Security Features*. <https://www.free-now.com/corporate-blog/multi-mobility-safety-month-free-now-safety-and-security-features/>.
- Fullerton, R. A., & Punj, G. (2004). Repercussions of Promoting an Ideology of Consumption: Consumer Misbehavior. *Journal of Business Research*, 57(11), 1239–1249.
- Goh, C. K. L., & Law, R. (2007). Applying the “Cloak of Invisibility” Technology to Security and Privacy in the Hotel Industry. *International Journal of Contemporary Hospitality Management*, 19(7), 600–605.
- Grégoire, Y., Ghadami, F., Laporte, S., Sénécal, S., & Larocque, D. (2018). How can firms stop customer revenge? The effects of direct and indirect revenge on post-complaint responses. *Journal of the Academy of Marketing Science*, 46(6), 1052–1071.
- Griffiths, M. A., & Gilly, M. C. (2012). Dibs! Customer Territorial Behaviors. *Journal of Service Research*, 15(2), 131–149.
- Grove, S. J., Pickett, G. M., Jones, S. A., & Dorsch, M. J. (2012). Spectator Rage as the Dark Side of Engaging Sport Fans: Implications for Services Marketers. *Journal of Service Research*, 15(1), 3–20.
- Guan, M., Li, Y., Scoles, J. D., & Zhu, Y. (2023). COVID-19 Message Fatigue: How Does It Predict Preventive Behavioral Intentions and What Types of Information are People Tired of Hearing About? *Health Communication*, 38(8), 1631–1640.
- Habel, J., Alavi, S., & Pick, D. (2017). When Serving Customers Includes Correcting Them: Understanding the Ambivalent Effects of Enforcing Service Rules. *International Journal of Research in Marketing*, 34(4), 919–941.
- Harcourt, B. E. (1998). Reflecting on the Subject: A Critique of the Social Influence Conception of Deterrence. *the Broken Windows Theory*. and Order-Maintenance Policing New York Style.
- Harvey, P., Martinko, M. J., & Borkowski, N. (2017). Justifying Deviant Behavior: The Role of Attributions and Moral Emotions. *Journal of Business Ethics*, 141(4), 779–795.
- Hayes, A. F. (2017). *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-based Approach*. Guilford Press.
- Hayes, R., & Downs, D. M. (2011). Controlling Retail Theft with CCTV Domes, CCTV Public View Monitors, and Protective Containers: A Randomized Controlled Trial. *Security Journal*, 24(3), 237–250.
- Hazée, S., Van Vaerenbergh, Y., Delcourt, C., & Warlop, L. (2019). Sharing Goods? Yuck, No! An Investigation of Consumers' Contamination Concerns About Access-Based Services. *Journal of Service Research*, 22(3), 256–271.
- Henkel, A. P., Boegershausen, J., Rafaeli, A., & Lemmink, J. (2017). The Social Dimension of Service Interactions: Observer Reactions to Customer Incivility. *Journal of Service Research*, 20(2), 120–134.
- Hennig-Thurau, T., Groth, M., Paul, M., & Gremler, D. D. (2006). Are All Smiles Created Equal? How Emotional Contagion and Emotional Labor Affect Service Relationships. *Journal of Marketing*, 70(July), 58–73.
- Herhold, K. (2020). Top Benefits & Challenges of Coworking Spaces. *Clutch*. <https://clutch.co/real-estate/resources/top-challenges-coworking-spaces>.
- Ho, V. (2018). *Stolen, Burned, Tossed in the Lake: E-Scooters Face Vandals' Wrath*. The Guardian.
- Huang, W. H. (2008). The Impact of Other-Customer Failure on Service Satisfaction. *International Journal of Service Industry Management*, 19(4), 521–536.
- Huang, Y. S. (Sandy), Fang, X., & Liu, R. (2021). Necessary Evil: A Strategy to Manage Dysfunctional Customer Behavior. *Journal of Services Marketing*, July 2020.
- Johnson, J. A. (2014). Measuring Thirty Facets of the Five Factor Model with a 120-Item Public Domain Inventory: Development of the IPIP-NEO-120. *Journal of Research in Personality*, 51, 78–89.
- Karelaia, N., & Keck, S. (2013). When Deviant Leaders are Punished More than Non-Leaders: The Role of Deviance Severity. *Journal of Experimental Social Psychology*, 49 (5), 783–796.
- Keizer, K., Lindenberg, S., & Steg, L. (2008). The spreading of disorder. *Science*, 322 (5908), 1681–1685.
- Kelling, G. L., & Wilson, J. Q. (1982). Broken Windows— the Police and Neighborhood Safety. *The Atlantic Monthly*, March, 29–38.
- Klein, N. J., Brown, A., & Thigpen, C. (2022). *Clutter and Compliance: Scooter Parking Interventions and Perceptions*.
- Komarova Loureiro, Y., Haws, K. L., & Bearden, W. O. (2018). Businesses Beware: Consumer Immoral Retaliation in Response to Perceived Moral Violations by Companies. *Journal of Service Research*, 21(2), 184–200.
- Li, H., Edwards, S. M., & Lee, J. H. (2002). Measuring the Intrusiveness of Advertisements: Scale Development and Validation. *Journal of Advertising*, 31(2), 37–47.
- Lime. (2021). *How do I end my ride?* <https://help.li.me/hc/en-gb/articles/115004745967-How-do-I-end-my-ride->.
- Macintosh, G., & Stevens, C. D. (2013). Individual Differences in Opportunistic Claiming Behavior. *Journal of Consumer Behaviour*, 12(1), 10–19.
- Orazi, D. C., & Pizzetti, M. (2015). Revisiting Fear Appeals: A Structural Re-inquiry of the Protection Motivation Model. *International Journal of Research in Marketing*, 32(2), 223–225.
- Perren, R., & Kozinets, R. V. (2018). Lateral exchange markets: How social platforms operate in a networked economy. *Journal of Marketing*, 82(1), 20–36.

- Rummelhagen, K., & Benkenstein, M. (2017). Whose Fault is it?: An Empirical Study on the Impact of Responsibility Attribution for Customer Misbehavior. *European Journal of Marketing*, 51(11–12), 1856–1875.
- Schaefers, T., Moser, R., & Narayanamurthy, G. (2018). Access-Based Services for the Base of the Pyramid. *Journal of Service Research*, 21(4), 421–437.
- Schaefers, T., Wittkowski, K., Benoit, S., & Ferraro, R. (2016). Contagious Effects of Customer Misbehavior in Access-Based Services. *Journal of Service Research*, 19(1), 3–21.
- Shaver, K. G. (1970). Defensive Attribution: Effects of Severity and Relevance on the Responsibility Assigned for an Accident. *Journal of Personality and Social Psychology*, 14(2), 101–113.
- Shen, C., Sun, Q., Kim, T., Wolff, G., Ratan, R., & Williams, D. (2020). Viral Vitriol: Predictors and Contagion of Online Toxicity in World of Tanks. *Computers in Human Behavior*, 108(March).
- Sousa, W., & Kelling, G. L. (2019). Advocate: Of ‘Broken Windows’, Criminology and Criminal Justice. In *Police Innovation: Contrasting Perspectives* (2nd ed., pp. 121–141). Cambridge University Press.
- Srivastava, H. S., Jayasimha, K. R., & Sivakumar, K. (2022). Addressing customer misbehavior contagion in access-based services. *Journal of Services Marketing*, 36(6), 849–861.
- Tonglet, M. (2002). Consumer Misbehaviour: An Exploratory Study of Shoplifting. *Journal of Consumer Behaviour*, 1(4), 336–354.
- Van Doorn, J., Mende, M., Noble, S. M., Hulland, J., Ostrom, A. L., Grewal, D., & Petersen, J. A. (2017). Domo Arigato Mr. Robot: Emergence of Automated Social Presence in Organizational Frontlines and Customers’ Service Experiences. *Journal of Service Research*, 20(1), 43–58.
- Weiner, B. (1985). An Attributional Theory of Achievement Motivation and Emotion. *Psychological Review*, 92(4), 548–573.
- Weiner, B. (2001). Reflections and Reviews Attributional Thoughts about Consumer Behavior. *Journal of Consumer Research*, 27(December 2000), 382–387.
- Weiner, B. (2006). *Social Motivation, Justice, and the Moral Emotions: An Attributional Approach* (Vol. 64, Issue C). Lawrence Erlbaum Associates Inc.
- WeWork. (2019). *WeWork to acquire mobile access control expert Waltz, enhancing global platform*. <https://www.wework.com/newsroom/wework-to-acquire-mobile-access-control-expert-waltz-enhancing-global-platform>.
- Wilson, J. Q., & Kelling, G. L. (1982). Broken Windows: The police and neighborhood safety. In *The Atlantic Monthly* (Issue March, pp. 29–38).
- Wirtz, J., & Kum, D. (2004). Consumer Cheating on Service Guarantees. *Journal of the Academy of Marketing Science*, 32(2), 159–175.
- Wirtz, J., Liu, S. Q., & Chun, H. H. (2019). *Platforms in the peer-to-peer sharing economy*.
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