Customer captivity, negative word of mouth, and well-being: A mixed-methods study

Abstract

Purpose—When customers feel that they have no choice but to stay with their current provider to obtain a service that they need, they feel captive. This study investigates customer captivity as a type of vulnerability and aims to evaluate its effects on customers' service evaluation and word-of-mouth behavior, as well as to identify solutions that reduce customers' feelings of captivity and improve their well-being.

Design/methodology/approach—This sequential, quantitative—qualitative, mixed-methods study draws from a survey of 1,017 customers and a qualitative analysis of 20 in-depth semi-structured interviews. Moderated mediation analysis is used to test the quantitative hypotheses; a thematic analysis explores the qualitative data.

Findings—The results of the quantitative study show that captivity emotions and price unfairness perceptions are two manifestations of customer captivity, which directly and indirectly affect service evaluations and word-of-mouth behavior. The findings of the qualitative study highlight how captive customers use emotional support-seeking negative word of mouth as a solution to reduce their captivity emotions and improve their well-being, by reinforcing their social ties and regaining a sense of control.

Research limitations/implications—This study advances transformative service research by demonstrating how captivity affects customers' well-being and customer vulnerability literature by investigating captivity as a type of vulnerability. It contributes to service marketing literature by identifying customer captivity as a boundary condition for generic service evaluation models.

Practical implications—Captive customers seek emotional support and consequently spread negative word of mouth. Therefore, it is critical for service providers to reduce customers' captivity feelings and implement adequate solutions to prevent negative word of mouth and decrease the risk of negative impacts on their profitability.

Originality/value—Any customer can become vulnerable, due to contextual circumstances. This study focuses on customer captivity as a type of vulnerability and proposes adapted solutions to improve customers' well-being.

Keywords—Customer captivity, service evaluations, negative word of mouth, emotion-focused coping, customer vulnerability, mixed methods.

Paper type—Research paper

Camille is an angry traveler, and she makes it known on [Swiss railway company]'s Facebook page: "Tonight, I want to express my displeasure to you. I took the train from Lucerne to Bellinzona. The train was blocked for thirty minutes. Apart from a 'sorry, thank you for your understanding,' we had to wait. Then, finally the train starts moving again! The controller passes by, I inform him that I missed my connection. He explains that he cannot do anything and tells me that I have to wait for the next bus at Locarno station. An hour and a half of waiting, alone! As a consolation, he offers me a 10-franc voucher for a drink to be used today in a [railway company] restaurant. What a joy, everything is closed! [Railway company], it's a shame there's no competition, I would have gladly gone to them."

Some marketplace structures, such as monopolies (Rayburn, 2015) or lock-in situations (Harrison *et al.*, 2012), reduce customer choices (Botti *et al.*, 2008), potentially leaving customers with the unpleasant sense that they cannot switch from their current service provider. Those customers might stay with a dissatisfying service provider, in the belief that they do not have the choice to leave because they do not have the resources for obtaining the service they need from a source other than this provider (Jones and Sasser, 1995; Leisen Polack, 2017b). They are thus left feeling captive and vulnerable (Fisk *et al.*, 2018; Rosenbaum *et al.*, 2017). Considering the harm that captive customers face in such marketplace structures, we propose that customer captivity constitutes a type of vulnerability (Commuri and Ekici, 2008; Hill and Sharma, 2020) and investigate the effect of such captivity on their service evaluations and word of mouth (WOM) behavior, as well as the solutions they use to reduce their captivity emotions and improve their well-being.

Although fined-grained investigations of the influence of captivity on customers' service evaluations and WOM behavior are scarce (Rayburn, 2015; Rayburn *et al.*, 2020)—limiting the identification and development of potential solutions to help these vulnerable customers improve their well-being—prior research has established that captive customers themselves do seek solutions (Fliess and Volkers, 2020). However, as highlighted by the need for this special issue

and recent calls for transformative service research into customer well-being (Anderson *et al.*, 2013; Ostrom *et al.*, 2015), we know little about which solutions captive customers adopt and their effectiveness. In this study, we define such solutions to customer captivity as coping responses adopted by customers that directly or indirectly reduce the negative feelings and emotions related to captivity and improve their well-being.

In responding to the call for papers of this special issue and seeking to identify solutions to customer captivity, this study thus pursues two main objectives. First, we assess the impact of captivity and its manifestations on customers' service evaluations (i.e., perceived service quality and satisfaction) and WOM behavior. Second, we explore the solutions used by captive customers to reduce their captivity feelings and their effectiveness. Stated differently, we aim to answer three research questions: (1) What are the effects of captivity on customers' service quality perceptions, satisfaction, and WOM behavior?, (2) What are the solutions captive customer use to respond to their captivity?, and (3) To what extent, are these solutions effective in improving captive customers' well-being? To garner answers, we adopt a sequential, quantitative—qualitative, mixed-methods approach (Ivankova *et al.*, 2006) seeking a rigorous, rich understanding of the captivity phenomena (Russell-Bennett *et al.*, 2019).

With the quantitative study, we investigate two manifestations of customer captivity—captivity emotions and perceptions of price unfairness—and their effects on customers' service evaluations and WOM behavior. Both manifestations affect customers' perceived service quality, satisfaction, and NWOM uniquely, such that captivity emotions directly influence these variables, whereas price unfairness perceptions moderate the relationships. With the qualitative study, we then undertake an in-depth investigation of the coping responses customers use to manage their captivity. The findings demonstrate that, among these responses, emotional support-seeking NWOM is the most often used and effective solution for reducing captivity emotions and

improving well-being.

In turn, this study contributes to transformative service research and customer vulnerability literature by specifying customer captivity as a type of vulnerability with implications for customer well-being. Building on previous customer captivity research, which tends to be mainly qualitative, we identify captivity emotions and price unfairness perceptions as two key manifestations of captivity, and we quantitatively assess their direct and indirect effects on customers' service evaluations and WOM behavior. Then the follow-up, qualitative study delineates the specific solutions captive customers use to reduce their captivity emotions and how they improve customers' well-being.

Our research also contributes to service marketing and relationship marketing literature, by demonstrating that customer captivity functions as a boundary condition in generic service evaluation and WOM models. Our empirical findings show that customer captivity affects customers' service evaluations and WOM behavior, so failing to take captivity-related variables into account will reduce the explanatory power of generic service evaluation and WOM models and might generate inaccurate managerial recommendations.

Finally, responding to recent calls for more research on emotions in service relationships (e.g., Furrer *et al.*, 2020; Liu *et al.*, 2019), this study also reveals the importance of captivity emotions, defined as customers' emotional responses to their captivity. We show how these negative emotions affect customers' service evaluations and well-being. We further demonstrate how NWOM can help relieve captivity emotions. Considering that NWOM spread by captive customers can affect service providers' reputations and profitability (Bhattacharya *et al.*, 2020), we outline some implications and potential solutions that service providers might provide to reduce customers' feelings of captivity.

The reminder of this paper proceeds as follows: First, we review extant studies on customer

captivity and its impact on customer well-being. Second, we draw on cognitive appraisal theory and price fairness perception theory to propose a conceptual model of the effects of captivity and its manifestations on customer service evaluations and NWOM. Third, we present the method and results of the quantitative study we used to test our hypotheses, followed by the method and findings of the qualitative study we used to clarify those results. Fourth, we conclude with a discussion and suggestions for further research.

Literature review

Customer captivity

In introducing the concept of customer captivity to service contexts, Rayburn (2015) uses a grounded theory approach and describes the feelings that customers have in situations in which they are dependent on service providers, due to limited choice, control, and power. Even when they are not satisfied, captive customers return, because they perceive a lack of options for obtaining a service they need from a source other than the current provider (Leisen Polack, 2017b). With a power–dependence perspective (Emerson, 1962), Rayburn (2015) further demonstrates that customer captivity stems from a subjective perception of asymmetry in the power relationship between customers and service providers. Subsequently, Rayburn *et al.* (2020) qualitatively investigate the concept and identify two conditions of customer captivity: perceived need and lack of available alternatives. Under these conditions, when perceiving they do not have any choice, customers are left with the feeling that they have little or no power and agency over their service relationship and therefore feel captive. Drawing on Rayburn *et al.* (2020), we hence define customer captivity as customers' feelings of not having the possibility to choose or leave a service relationship, due to a perceived need for the service and a lack of alternatives.

Customer captivity thus differs from other concepts pertaining to power imbalances in service relationships, such as calculative commitment (Jones *et al.*, 2007), switching barriers

(Colgate *et al.*, 2007) and lock-in (Harrison *et al.*, 2012). For these concepts, customers have the choice to stay with their current service provider based on a cost–benefit assessment of the situation. Despite switching costs, some of these customers may still choose to leave the service relationship. In the case of captivity, customers do not even perceive to have such a choice (Rayburn *et al.*, 2020). Although previous studies have explored customer captivity, they do not address critical questions about how customer captivity manifests and what consequences it has for customer service evaluations and WOM behavior.

Customer captivity, vulnerability and well-being

Customer vulnerability is "a state of powerlessness that arises from an imbalance in marketplace interactions" (Baker *et al.*, 2005, p. 134). This definition has recently been completed by Hill and Sharma (2020, p. 551), who define vulnerability as "a state in which consumers are subject to harm because their access to and control over resources are restricted in ways that significantly inhibit their ability to function in the marketplace." Vulnerability occurs when customers cannot realize the maximum level of value from a service (Rosenbaum *et al.*, 2017) and depend on the service provider to help them obtain needed outcomes (Commuri and Ekici, 2008).

Hill and Sharma (2020) further argue that it is the contextual circumstances faced by customers, rather than solely the categories used to describe them (e.g., low income, handicap, elderly, etc.), that leads to customer vulnerability. Moreover, they detail that there are different context-based types of vulnerability depending on their antecedents. They identify three types of antecedents—individual (e.g., psychological and physical characteristics), interpersonal (e.g., social status or support), and structural (e.g., business practices, environmental constraints). Within Hill and Sharma's (2020) framework, customer captivity can be considered as a type of vulnerability with structural antecedents, because in captivity contexts, marketplace configurations harm customers by restricting their resources and control. In captivity situations,

customers feel "at the mercy" of the service providers and they engage in exchanges because they have to, not because they want to (Rayburn, 2015). Therefore, customers might feel vulnerable in service relationships that hold them captive and limits their control and resources (Commuri and Ekici, 2008; Hill and Sharma, 2020), leaving them dependent on service providers to act fairly (Baker *et al.*, 2005).

Captivity, as a type of vulnerability, harms customers and affects their well-being (Rosenbaum *et al.*, 2017). Customer well-being consists of various long-term features, such as overall health, financial security, and social inclusion, as well as short-term aspects related to daily experiences, such as affective (e.g., feelings, emotions), psychological (e.g., stress, peace of mind), and physical states (Diener *et al.*, 1999; Rahman, 2020). Hence, when customers feel captive in their service relationships, it reduces their well-being notably due to negative emotions, stress, physical discomfort, and perceived threats to their resources.

As argued by Hill and Sharma (2020), distinguishing between different context-based types of vulnerability is critical, notably for understanding the resulting consequences and solutions, which are likely to differ in each type of vulnerability context. For example, vulnerability based on individual antecedents, such as poverty or handicap, would necessitate different solutions compared to vulnerability based on structural, marketplace antecedents such as customer captivity.

Seeking solutions to cope with customer captivity

Because of the negative impact of captivity emotions on their well-being, captive customers seek solutions to regain control (Botti *et al.*, 2008; Rayburn, 2015) by engaging in power balancing efforts (Emerson, 1962). Through such efforts, they try to cope with their captivity to reestablish a balance of power and eventually improve their well-being (Fliess and Volkers, 2020; Rayburn *et al.*, 2020). Coping responses, as cognitive and behavioral efforts to manage affected well-being

(Lazarus and Folkman, 1984), have been studied in various contexts, but insights into how customers cope with captivity and seek solutions to improve their well-being are relatively limited (Fliess and Volkers, 2020).

Across various contexts though, different coping responses have been identified, such as complaining, distancing, and NWOM (Duhachek, 2005; Gelbrich, 2010; Lazarus and Folkman, 1984). However, the effectiveness of these coping responses might be limited by customers' constrained choice (Botti *et al.*, 2008) and lack of resources and control (Hill and Sharma, 2020). Whereas Rayburn *et al.* (2020) suggest, through their conceptual research, that some coping responses, such as exiting, complaining, and NWOM, might lead to possible solutions for captive customers, Fliess and Volkers (2020) argue that these customers often believe they have limited options and that active complaining directly to the service provider does not represent an effective solution to cope with their captivity. Nevertheless, to date, no research has empirically investigated the solutions that customers use to copy with their captivity, as well as their effectiveness.

Conceptual framework

Relationship marketing theory suggests that developing and maintaining long-term relationships with customers improves firms' performance (Palmatier *et al.*, 2006). However, to maintain such relationships, firms might be tempted to hold their customers captive (Patterson and Smith, 2003), which has been referred to as the dark side of relationship marketing (Frow *et al.*, 2011). Customers who feel captive may respond negatively to relationship marketing tactics (Lee and Romaniuk, 2009; Leisen Pollack, 2017a) if the lack of choice lowers their evaluation of service quality or reduces their satisfaction (Botti *et al.*, 2008; Patterson and Smith, 2003). Captive customers also might use NWOM to vent their dissatisfaction (Conlon *et al.*, 2004), seek emotional support (Gelbrich, 2010), and improve their well-being (Fliess and Volkers, 2020). In

doing so, even if they cannot leave the service relationship, captive customers might impose some costs on firms and reduce their profitability (Bhattacharya *et al.*, 2020). It is then critical for service providers to understand how customer captivity affects service relationships.

To gain such understanding, we first turn to customer captivity literature and identify two manifestations of customer captivity: captivity emotions and price unfairness perceptions. Then we leverage service marketing insights to build a generic baseline model of service evaluation and WOM behavior. To adapt this baseline model to a captivity context, we offer hypotheses about the effects of the two manifestations of customer captivity by drawing on (1) cognitive appraisal theory (Lazarus, 1991) and (2) price fairness perception theory (Xia *et al.*, 2004) and thus investigate how customer captivity might constitute a boundary condition in generic service evaluation and WOM behavior models.

Manifestations of customer captivity

Several aspects of a service relationship intersect to affect the potential for consumers to feel captive (Rayburn *et al.*, 2020). In particular, two characteristics of captivity—lack of choice and perception of power or dependence asymmetry (Fliess and Volkers, 2020; Lee, 2010; Rayburn, 2015; Rayburn *et al.*, 2020)—result in two different manifestations of captivity: captivity emotions and price unfairness perceptions.

First, a perceived lack of choice triggers negative emotional responses among customers.

Rayburn (2015) argues that captive customers are subject to negative affect resulting from the lack of control in their service relationships. Several negative emotions and feelings are tied to customer captivity, including feeling resigned, angry, depressed, or hopeless (Rayburn, 2015). The extent of these negative emotional responses reflects customers' feelings of captivity, as determined by their lack of alternatives to fulfill their need for a service. Empirically, Jones *et al.* (2007) find a positive relationship between calculative commitment, which they measure using

captivity items, and negative emotions. Fliess and Volkers (2020) also assert that negative emotions and feelings evoked by customers experiencing captivity reveal their affected well-being. According to these contributions, negative emotional responses are manifestations of customer captivity; we refer to them as captivity emotions.

Second, customers' perceptions of power or dependence asymmetry, due to a lack of alternatives for a needed service, prompt feelings of captivity (Emerson, 1962; Rayburn, 2015). Captive customers generally do not trust service providers to act fairly (Hill et al., 2015) and often express discontent with their pricing practices (Lee, 2010). Seiders and Berry (1998) found that customers' vulnerability, resulting from a lack of alternatives and resources, triggers perceptions of unfairness. That is, in captivity situations, when customers perceive a power imbalance, they might suspect that powerful, self-interested service providers will attempt to exploit their dependence and vulnerability (Emerson, 1962). For example, captive customers might anticipate that service providers will charge higher prices for the same or poorer quality to increase their profits (Frow et al., 2011; Hill et al., 2015; Lee, 2010), which they regard as unfair (Bolton et al., 2003; Martín-Ruiz and Rondán-Cataluña, 2008), because it violates the principle of dual entitlement, according to which fairness is shaped by the belief that firms are entitled to a reasonable profit and customers are entitled to a reasonable price (Kahneman et al., 1986). Rayburn et al. (2020, p. 161) illustrate captive customers' anticipation of unfair price practices with a quote from a study participant: "This gives the organization power. They can charge people what they want as well as give continuously horrible customer service and customers are forced to come back." Perceptions of price unfairness, stemming from the greater power of the service provider (Xia et al., 2004), thus represent a second manifestation of customer captivity.

In our theoretical framework, we suggest that these two manifestations influence customers' service evaluations and WOM behavior differently. Captivity emotions directly affect customers'

perceived quality, satisfaction, and NWOM, whereas price unfairness perceptions moderate the relationships among these variables (see Figure 1, Study 1). To disentangle the direct and moderating effects of the two manifestations of captivity, we thus formulate hypotheses at the manifestation level rather than the customer captivity level.

[Insert Figure 1 About Here]

Baseline model

To develop our hypotheses, we start with a baseline model of customers' service evaluation and WOM and adapt it to the context of customer captivity. In this generic, baseline model, customer satisfaction mediates the relationship of perceived service quality with NWOM. We start with this model because it is well validated by service marketing literature (e.g., Brady and Robertson, 2001; De Ruyter *et al.*, 1997). In the next step, we add the two manifestations of customer captivity and hypothesize their direct and moderating effects as boundary conditions of the service evaluation model.

Direct effects of captivity emotions

Drawing on cognitive appraisal theory (Lazarus, 1991), we propose that captivity emotions reduce service quality perceptions and satisfaction and increase NWOM. Cognitive appraisal theory stipulates that emotions are experienced as a result of customers' appraisal of situations and thoughts and affect their perceptions and behaviors (Bagozzi *et al.*, 1999; Watson and Spence, 2006). Thus, customers' appraisal of their captivity, as something reducing their well-being, elicits negative emotional responses, which affect their cognitive and affective evaluations and behaviors (Izard, 1977; Lazarus, 1991). Agency, or the lack thereof, has been identified as a key dimension of appraisal mostly associated with negative emotions (Watson and Spence, 2006). Customers' negative affective state triggers them to engage in more systematic cognitive evaluations of the service and pay more attention to cues that might signal lower quality (Smith

and Bolton, 2002). Negative emotional responses also decrease customer satisfaction (Smith and Bolton, 2002) and trigger NWOM (Harrison-Walker, 2019; Jones *et al.*, 2007).

The relationships among emotions, service evaluations and perceived service quality (e.g., Liljander and Standvik, 1997; Mattila and Enz, 2002), satisfaction (e.g., Oliver, 1993; Smith and Bolton, 2002), and NWOM (e.g., Harrison et al., 2021; Wetzer et al., 2007) have been studied in several empirical studies, though existing research mostly concentrates on emotions elicited during and after service encounters. Some other studies have investigated context-specific emotions and how they influence customers' service evaluations and behaviors (Wang and Beise-Zee, 2013; Le et al., 2020). For example, referring to experience and credence services, Alford and Sherrell (1996) demonstrate that customers' general affect, formed overtime by past experiences with the service category, has a significant effect on service performance evaluation. White (2010) finds a negative relationship of an emotional factor composed of anger and disappointment with students' university services quality perceptions and satisfaction. Brown and Kirmani (1999) determine that pre-encounter affect influences customers' service expectations, performance evaluation and satisfaction. Wang and Beise-Zee (2013) investigate service responses to customers' negative emotional states related to a business trip and demonstrate their positive effect on customer satisfaction. Finally, in a high switching costs context, Jones et al. (2007) find a significant direct effect of negative emotions generated throughout a service relationship on NWOM.

Thus, we predict that captivity emotions, as customers' emotional response to their captivity, affect customers' service evaluations and behavior by decreasing their perceived service quality and satisfaction and increasing NWOM:

H1: Captivity emotions are negatively associated with customers' perceived service quality.

H2: Captivity emotions are negatively associated with customers' satisfaction.

H3: Captivity emotions are positively associated with customers' negative word of mouth. *Moderating effect of perceived price unfairness*

Drawing on price fairness perception theory (Xia et al., 2004), we propose that captive customers' price unfairness perceptions moderate the relationships among perceived service quality, satisfaction, and NWOM. Price fairness theory suggests that when services are perceived as overpriced, it exacerbates customer reactions to assessments of poor service quality and satisfaction (Xia et al., 2004). According to Xia et al. (2004), this effect is based on the motivational role of emotional responses connected to the cognitive comparison between the price paid and the benefits received. In captivity situations, customers often suspect service providers of attempting to exploit their vulnerability by charging high prices to increase their profits (Herrmann et al., 2007; Seiders and Berry, 1998). When, such a price is perceived as too high in comparison to what is received, it is perceived as unfair because it violates the dual entitlement principle (Kahneman et al., 1986). The violation of this principle creates a cognitive inconsistency (Homburg et al., 2005), which captive customers seek to reduce by adapting their satisfaction level and WOM behavior. That is, price unfairness perceptions increase customers' sensitivity (Xia et al., 2004), especially when these customers feel vulnerable and disadvantaged due to their captivity (Martín-Ruiz and Rondán-Cataluña, 2008; Seiders and Berry, 1998). Therefore, we expect that compared with customers who perceive prices as fair, customers who perceive prices as unfair react to a perceived service quality decrease with a larger decrease in satisfaction and a larger increase in NWOM. Similarly, compared to customers who perceive prices as fair, customers who perceive prices as unfair react to a satisfaction decrease with a larger increase in NWOM.

In support of these arguments, empirical evidence in other contexts indicates that unfair

price perceptions moderate relationships among perceived service quality, satisfaction, and NWOM. In a quick-casual restaurant context, Ryu and Han (2010) find that customers' perceptions of prices as too high moderate the relationship between service quality and satisfaction. In a business-to-business setting, Caruana *et al.* (2000) also reveal that perceived value—or what is received compared with what is paid—influences the relationship of service quality and satisfaction. According to Richins (1983), studying consumer goods, price unfairness perceptions increase the effect of negative emotional states on perceived service quality, dissatisfaction, and WOM. In a customer captivity context, we similarly predict that price unfairness perceptions moderate the relationships among perceived service quality, satisfaction, and NWOM:

H4a: Customers' price unfairness perceptions strengthen the positive relationship between perceived service quality and satisfaction, such that as price unfairness perceptions increase, a decrease in perceived service quality is associated with increasingly stronger decreases in satisfaction.

H4b: Customers' price unfairness perceptions strengthen the negative relationship between perceived service quality and negative word of mouth, such that as price unfairness perceptions increase, a decrease in perceived service quality is associated with increasingly stronger increases in negative word of mouth.

H4c: Customers' price unfairness perceptions strengthen the negative relationship between satisfaction and negative word of mouth, such that as price unfairness perceptions increase, a decrease in satisfaction is associated with increasingly stronger increases in negative word of mouth.

Design Overview

To address our research objectives, we use a mixed-methods sequential design with a quantitative

study (Study 1) and a follow-up qualitative investigation (Study 2) (Creswell, 2014; Ivankova *et al.*, 2006) (see Web Appendix Figure A1 for a graphical representation). First, Study 1 aims to test our hypotheses and assess the impact of the manifestation of captivity on customers' services evaluation and WOM behavior. Second, based on the findings of Study 1, Study 2 explores the range and effectiveness of solutions used by customers in response to their captivity and gain deeper insights into the effects of NWOM on their negative emotions and well-being (see Figure 1).

Study 1

To test H1–H4, we sent a questionnaire-based survey to a sample of customers of three different services (railway passenger, postal, and mobile phone) in the French-speaking part of Switzerland. In Switzerland, customers of these services often feel captive in their relationships with the providers, because the railway and postal services benefit from quasi-monopoly situations, and mobile phone services generally impose long-term subscriptions or high switching costs, as well as uncertain quality across alternative services. By investigating the impact of customer captivity in these three services, with varying levels of captivity (Rayburn *et. al*, 2020), we increase the generalizability of the findings.

Sample

A paper-and-pencil questionnaire was sent by regular mail to a sample of 3,150 customers in the French-speaking part of Switzerland. They had been randomly sampled from the phone book and answered the survey in reference to only one of the three services. No monetary incentives were provided, though a summary of the main results was promised to respondents who provided their address. We received 1,154 questionnaires back, for an overall response rate of 36.6%. After deleting incomplete questionnaires with more than 10% missing values (Hair *et al.*, 2010), we retained a useful sample of 1,017 respondents (327 for railway passenger services, 352 for postal

services, and 338 for mobile phone services) for the data analysis. The full sample is nearly evenly split by gender (49.9% women), and the average age is 53.0 years (standard deviation [SD] = 16.3 years) (see Table 1 for further sample characteristics). The geographical location, education levels, and incomes of these respondents all are representative of the general population of the French-speaking part of Switzerland.

[Insert Table 1 About Here]

Measures

The items, each of which used 9-point Likert-style scales, were adapted from validated, multiitem measures, when available. All items were pre-tested to ensure they convey the intended
meaning in the context of the study. In adapting items from the SERVQUAL scale (Parasuraman
et al., 1988) to measure perceived service quality, as recommended by Cronin and Taylor (1992),
we include items pertaining to service performance (SERVPERF). To measure satisfaction, we
adapt four dissatisfaction items developed by Sabadie (2003) for a public services context to our
service captivity context, which we reverse-coded for the analysis. Five items also developed by
Sabadie (2003) provide the measure of NWOM. We measured customer captivity with three items
developed specifically for this study: "feeling of having a choice of service provider," "feeling of
being constrained to use the current service provider," and "feeling that it would be difficult to
switch to another service provider."

Price unfairness perceptions was measured with a single item: "I find the prices charged for the services of [service provider] too expensive." This item was developed specifically for this study in a captivity context, inspired by the price unfairness measurement instrument from Martín-Ruiz and Rondán-Cataluña (2008). As established during the pretest of our questionnaire, this item only focuses on one dimension of price unfairness perceptions, which is customers' price perceptions in comparison to the value they receive, as other points of reference such as

competitors' prices were not relevant in the captivity context of our study. The lack of available alternatives indeed prevents customers from comparing prices with other providers. Moreover, the extant literature on price unfairness in services often includes comparison with prices paid by other customers, which is not relevant for the context of our study, especially in the case of monopolistic situations. Moreover, the pretest also reveals that in a captivity context, when asked about a service being "too expensive," French-speaking Swiss respondents perceive a price which is too expensive as unfair because service providers are likely to use their dominant position to overcharge captive customers to increase their profits. This interpretation was then tested with an additional study to assess the face validity of the item (see Web Appendix A3 for more details).

To measure captivity emotions, seven emotions ranging from anger to joy were adapted from Izard (1977). In addition to four negative emotions, one positive and two neutral emotions were included to avoid framing bias (Levin *et al.*, 1998). One additional item, the "feeling of being held hostage," was added after pre-testing the questionnaire, based on verbal reports used by respondents to describe their emotional response to their captivity (in the Web Appendix, Table A2 provides the wording of all items). We included gender, age, education level, and income as control variables. To reduce the potential for common method bias, we used preventive measures, as recommended by Podsakoff *et al.* (2003). The items were worded to avoid invoking social desirability concerns, we used negatively worded items to measure satisfaction to reduce response pattern bias, and the dependent and independent variables were separated by filler items. *Analytical strategy*

The analytical strategy included six steps. First, prior to testing the hypotheses, we assessed the relationships of customer captivity with captivity emotions and price unfairness perceptions.

Second, we tested the reliability and validity of the measurement models, and we checked for a potential biasing effect of common method variance. Third, with tests of the baseline model, we

assessed its nomological validity. Fourth, we added captivity emotions to the baseline model to determine its direct effects on the variables in the model. Fifth, with regard to the moderating effects of price unfairness perceptions, we tested a moderated mediation model. Sixth, we computed additional models to rule out alternative explanations.

Results

Validation of manifestations of customer captivity

To validate the two manifestations of customer captivity, we conducted a regression analysis using structural equation modeling (SEM). The three items used to measure customer captivity achieve satisfactory reliability (Cronbach's alphas: railway services .75, mobile phone services .73, and postal services .70), as do the four items measuring captivity emotions (Cronbach's alphas: railway services .87, mobile phone services .89, and postal services .85). We then regressed captivity emotions and price unfairness perceptions on customer captivity. As expected, the slopes of the two models are positive and significant across the three service contexts (see Figure 2 and Web Appendix A4). Thus, captivity emotions and price unfairness perceptions appear to be valid manifestations of customer captivity.

[Insert Figure 2 About Here]

Construct validity

Before conducting confirmatory factor analyses (CFA) in AMOS 26 (Arbuckle, 2019) to assess the validity and reliability of the measures, we performed separated exploratory factor analyses on the 22 items of the SERVPERF scale and on the seven items measuring captivity emotions for each of the three industry samples. For the SERVPERF scale, all the items load on the first unrotated factor, so we combined the 11 items with factor loadings higher than .65 across the three samples into a composite measure of perceived service quality. For captivity emotions, four items measuring negative emotions (anger, annoyance, disappointment, and the feeling of being

held hostage) exhibit unidimensionality across the three service industries were retained to measure captivity emotions.

As validity and reliability checks, we then computed separate CFAs for the three industry samples. The Cronbach's alpha coefficients and composite reliabilities (CR) are at least .70, and the factor loadings exceed .50, which suggest acceptable reliability and convergent validity (Hair *et al.*, 2010). Table 2 presents the descriptive statistics, construct reliability, and correlation coefficients. To assess discriminant validity, we conducted a simultaneous test of a four-variable model (the three variables in the simplified baseline model and captivity emotions). We used maximum likelihood estimation procedures, because the data do not strongly violate multivariate normality assumptions (McDonald and Ho, 2002). Following common practice (Byrne, 2016; Hu and Bentler, 1999), we relied on multiple indicators to assess model fit: normed chi-square (χ^2 /df), root mean square error of approximation (RMSEA), non-normed chi-square fit index (NNFI), and comparative fit index (CFI). Thresholds of RMSEA \leq .06, NNFI \geq .90, and CFI \geq .95, as well as χ^2 /df less than or equal to 3, indicate good model fit (Hair *et al.*, 2010; Hu and Bentler, 1999).

[Insert Table 2 About Here]

In AMOS 26, we estimate the four-factor CFA model with 23 items and find no problematic estimates and good fit. In particular, the normed chi-square values are 1.673, 1.786, and 1.631 for railway, postal, and mobile phone services, respectively. The goodness-of-fit indices also suggest good fit across all three industries. The RMSEA values are .045 [90% confidence interval (CI): .038; .053] for railway services, .047 [90% CI: .040; .054] for postal services, and .043 [90% CI: .035; .051] for mobile phone services. In addition, for railway services, the fit indices are .966 (NNFI) and .970 (CFI); for postal services, these values are .962 (NNFI) and .967 (CFI); and for mobile phone services, they are .966 (NNFI) and .970 (CFI).

To assess convergent validity, we consider factor loadings, which are significant and exceed the .50 threshold (Hair *et al.*, 2010), ranging from .60 to .92 in the railway sample, from .57 to .90 in the postal services sample, and from .67 to .88 in the mobile phone sample, with the exception of one NWOM item in the mobile phone sample that has a value of .37. The Cronbach's alphas and CR values are greater than .70 (see Table 2). The average variances extracted also exceed .50 (Hair *et al.*, 2010), and their square roots range from .73 to .84 for the railway services, .75 to .82 for the postal services, and .76 to .78 for mobile phone services, higher than any of the respective pairwise correlations, in support of discriminant validity (Fornell and Larcker, 1981).

As is true for any self-reported data, there is the potential for common method variance (CMV). Beyond the preventive measures taken to reduce its likelihood, we conducted two tests to determine the extent of CMV in the data (Podsakoff *et al.*, 2003): a Harman one-factor test and then the unmeasured latent method factor technique. The results of both tests suggest that CMV is not a pervasive problem (see Web Appendix A5 for details).

Structural model and hypothesis testing

To assess the nomological validity of the baseline model and test the hypotheses, we conducted a regression analysis using PROCESS v3.5 (Hayes, 2018). First, we computed a mediation analysis using the bootstrapping approach, with 5,000 samples with replacement (Hayes, 2018), to test the relationships in the baseline model. This bootstrap test provides more power than a Sobel test (Zhao *et al.*, 2010). Second, we added captivity emotions to the model and conducted a serial mediation analysis with perceived service quality and satisfaction as mediators. Third, we performed a moderated mediation analysis to identify the moderating effect of price unfairness perceptions, after controlling for captivity emotions. Because the measure of price unfairness perceptions relies on a continuous scale, we used the PROCESS macro to test the conditional effects (Hayes, 2018) rather than multi-group SEM, because it avoids the negative effects of

splitting continuous moderators at an artificial level (McClelland *et al.*, 2015; Rucker *et al.*, 2015). However, measurement errors will result in biased estimates of regression coefficients (Cheung and Lau, 2017), and unlike SEM, PROCESS does not account for measurement errors (Hayes and Rockwood, 2020). Therefore, we used factor-based scores rather than average scores to compute the variables included in the models.²

In the baseline models, perceived service quality is the independent variable, satisfaction is the mediator, and NWOM provides the dependent variable. We ran simple mediation models (Hayes, 2018, Model 4). The bootstrapping results indicate a significant mediation process for the three services (indirect effects: -.392 [95% CI: -.542; -.160], -.402 [95% CI: -.533; -.296] and -.262 [95% CI: -.361; -.177], for railway, postal, and mobile phone services, respectively). Moreover, all the structural coefficients are significant and in the expected directions (see Tables 3a, b, and c, panels 1). The explanatory power of the models is satisfactory, with *R*-squared values of .241, .182, and .241 for satisfaction and .445, .508, and .437 for NWOM, in relation to the railway, postal, and mobile phone services, respectively. These results support the validity of the baseline model.

Then, we added captivity emotions to the models and ran serial mediation analyses (Hayes, 2018, Model 6), with captivity emotions as the independent variable, perceived service quality and satisfaction as mediators, and NWOM as dependent variables. The bootstrapping results indicate a significant mediation process for the three services (total indirect effects: .193 [95% CI: .135; .260], .206 [95% CI: .147; .272], and .170 [95% CI: .112; .236], for railway, postal, and mobile phone services, respectively). The effects of captivity emotions on the variables of the baseline model are significant and in the expected directions. In detail, the direct effects of negative emotions on perceived quality are –.173 [95% CI: –.227; –.118], –.196 [95% CI: –.250; –.143], and –.185 [95% CI: –.244; –.126], for the railway, postal, and mobile phone services,

respectively, in full support of H1. They also have positive direct effects on satisfaction, as we predicted in H2: –.318 [95% CI: –.399; –.237], –.237 [95% CI: –.321; –.154], and –.152 [95% CI: –.219; –.084], for the railway, postal, and mobile phone services, respectively. We uncover positive directs effects of the captivity emotions on NWOM: .253 [95% CI: .185; .320] for railway services, .211 [95% CI: .148; .275] for postal services, and .118 [95% CI: .055; .181] for mobile phone services. We thus find full support for H3 (see Tables 3a, b, and c, panels 2). Adding captivity emotions also increases the explanatory power of the models. For the three industry samples, the *R*-squared values for railway, postal, and mobile phone services are as follows: for perceived service quality .107, .130, and .103; for satisfaction, .359, .249, and .283, and for NWOM, .525, .562, and .459. Captivity emotions thus directly and indirectly affect customer service evaluation and NWOM.

Next, we added price unfairness perceptions and ran moderated mediation models (Hayes, 2018, Model 59³), with perceived service quality as the independent variable, satisfaction as the mediator, price unfairness perceptions as the moderator, NWOM as the dependent variable, and captivity emotions as a covariate. The bootstrapping results indicate a significant moderating effect of price unfairness perceptions on the relationship between perceived service quality and satisfaction for railway services (.081 [95% CI: .006; .157]) but not for postal and mobile phone services, providing only partial support for H4a. The significant moderating effect of price unfairness perceptions on the relationship between perceived service quality and NWOM for mobile phone services (-.074 [95% CI: -.131; -.016]), but not for railway and postal services, provides partial support for H4b. Finally, we find significant moderating effects of price unfairness perceptions on the relationship between satisfaction and NWOM for railway services (-.083 [95% CI: -.127; -.039]), and postal services (-.049 [95% CI: -.081; -.017]), but not for mobile phone services, providing partial support for H4c (see Tables 3a, b, and c, panels 3). For

the three industry samples, the *R*-squared values for railway, postal, and mobile phone services are as follows: satisfaction .377, .267, and .313, and NWOM .557, .574, and .483.

To investigate the moderating effect of price unfairness perceptions further, we assessed their overall indirect effect on the total effect of perceived service quality on NWOM, in accordance with Preacher *et al.*'s (2007) bootstrapping procedure, then probed its conditional effects using a Johnson-Neyman floodlight test to identify the regions of the moderator variable where the conditional effects are significant (Johnson and Neyman, 1936). This test is superior to other options, because the effects can be interpreted by using all moderator values, which limits the potentially arbitrary choice of cutoff values (Spiller *et al.*, 2013).

According to this analysis, perceived price unfairness perceptions negatively moderate the total effect of perceived service quality on NWOM. Figure 3 illustrates this negative interaction. For all three services, the higher confidence bands do not cut the x-axis; that is, the moderating effect of perceived price unfairness is significant across the complete range of data available in our samples (Figure 3, left panels). The right panels of Figure 3 show the regression lines of the total effect of perceived service quality on NWOM at different levels of price unfairness perceptions. These results reveal that the negative effects of perceived service quality grow stronger at higher levels of price unfairness perceptions for all three services. As perceived service quality decreases and price unfairness perceptions increase, captive customers spread more NWOM.

[Insert Table 3 and Figure 3 About Here]

For richer insights, we also considered four alternative models. First, we ran moderated serial mediation models (Hayes, 2018, Model 92) with captivity emotions as the independent variable, perceived service quality and satisfaction as mediators, and price unfairness perceptions and NWOM as the dependent variables. Compared with the moderated mediation models in

which captivity emotion functions as a control variable, these models add the interactions between price unfairness perceptions and captivity emotions. The results rule out significant effects of these interactions in any of the service industries, with the sole exception of the mobile phone industry and the interaction between perceived service quality and NWOM (see Web Appendix A6). Moreover, these models do not provide any additional explanatory power and are less parsimonious than the moderated mediation models.

Second, to assess the relevance of using captivity emotions and price unfairness perceptions as two manifestations of customer captivity, we tested serial mediation models with customer captivity as the independent variable, perceived service quality and satisfaction as the mediators, and NWOM as the dependent variable (Hayes, 2018, Model 6). We also considered moderated mediation models with perceived service quality as the independent variable, satisfaction as the mediator, customer captivity as the moderator, and NWOM as the dependent variable (Hayes, 2018, Model 59). Thus, we can assess the direct and conditional effects of customer captivity. As these results show, customer captivity has both direct and conditional effects on the baseline models in the three services, though the explanatory power of these models again is smaller than that of the models with captivity emotions and price unfairness perceptions (Web Appendix A6). Therefore, we gain support for the relevance of disentangling the effects of the two manifestations of customer captivity.

Finally, to determine if it is relevant to account for the moderating effects of price unfairness perceptions, we tested direct effect only models, with price unfairness perceptions as the independent variable, perceived service quality and satisfaction as the mediators, and NWOM as the dependent variable (Hayes, 2018, Model 6). Across all three service industries, price unfairness perceptions directly affect perceived service quality, satisfaction, and NWOM, though the explanatory power of these models is less than that of the moderated mediation models that

include the conditional effects of price unfairness perceptions (see Web Appendix A6). Taking these effects into account thus is relevant.

Discussion

These results provide support for the impact of the two manifestations of captivity—captivity emotions and price unfairness perceptions—on customers' service evaluations and NWOM.

Captivity emotions have direct effects on customers' perceived service quality, satisfaction, and NWOM across three service industries. Price unfairness perceptions moderate some of the relationships between these variables; they have an overall conditional effect on the total effect of perceived service quality on NWOM across the three service industries.

Price unfairness perceptions moderate the relationships between perceived service quality and satisfaction and between satisfaction and NWOM for railway services, but only the relationship between satisfaction and NWOM for postal services and between perceived service quality and NWOM for mobile phone services. These differences likely reflect varying levels of captivity that arise across the three industries (Rayburn *et al.*, 2020). Railway and postal services are quasi-monopolies, whereas mobile phone services impose contractual captivity. The distinct results also might reflect differences in price levels; the prices of postal services are much lower than those of railway tickets or mobile phone plans. Overall, the moderating effect of price unfairness perceptions appears contingent on the type of industry.

The results also show that the more customers feel captive, the more they spread NWOM. However, our quantitative study does not provide any information about the effectiveness of such behaviors to relieve customers' captivity feelings and improve their well-being. When feeling captive, customers may use NWOM as an emotional support-seeking response (Yi and Baumgartner, 2004). Fliess and Volkers (2020) suggest that to diminish the negative effects of captivity on their well-being, some customers might evoke emotion-focused coping responses.

Could NWOM constitute a solution that customers deliberately or unconsciously use to cope with their captivity? If so, what is the effectiveness of such a coping behavior and how does it improve captive customers' well-being? Existing research does not provide any empirical evidence in this regard. Moreover, are there other possible solutions that captive customers might use and are they effective? To address these questions, we conducted a follow-up, qualitative study.

Study 2

Considering the lack of empirical evidence regarding the effectiveness of customers' coping behaviors as solutions to improve their well-being, we designed a follow-up qualitative study to (1) explore the range and effectiveness of solutions used by customers as responses to their captivity and (2), gain deeper insights into the effects of NWOM on captive customers' negative emotions and well-being.

Interview guide

Ensuring the quality and rigor of our qualitative research process was a key concern, which we addressed from the start by carefully developing an interview guide based on the results of the quantitative study and theoretical concepts from prior literature, then adjusting it as needed after the first six interviews (Creswell, 2014). We asked informants about their personal experiences of captivity with railway, postal, or mobile phone services. Prior to addressing informants' coping behaviors and their effectiveness, the interviews started with opening questions related to the characteristics and manifestations of customers' captivity. These opening questions were meant to help informants remember their affective state in captivity situations (see Web Appendix A9 for findings related to the characteristics and manifestations of customer captivity). We then asked questions about how they responded to and coped with their captivity, as well as their WOM behavior and ensuing feelings. The in-depth, semi-structured interview format encouraged dialogue (Azzari and Baker, 2020), hence we employed follow-up questions to explore

informants' feelings and thoughts thoroughly. By relying on a set of fixed questions, this format also allowed us to establish good comparisons between informants' answers (Creswell, 2014). Sample

To select informants, we used a purposeful sampling strategy (Suri, 2011) and sought informants who promised to be rich sources of information (Patton, 2014). Considering the captivity emotions identified in the quantitative study and the different WOM behaviors mentioned in prior literature, we also sought maximum variation sampling, to find informants who differed sufficiently from one another (Suri, 2011). By identifying confirmatory and disconfirmatory input, we ensured sufficient examples that could confirm or challenge emerging themes, which adds to the richness, depth, and credibility of the findings (Patton, 2014). Finally, informants had to have first-hand experience with one of the three services. The 20 in-depth, semi-structured interviews (postal services n = 5, railway services n = 7, mobile phone services n = 8) each lasted 20–45 minutes and were recorded and transcribed (Web Appendix Table A7 presents the informants' characteristics).

Data analysis

To identify themes and provide meaning to the data, while also allowing for unified interpretations, we implemented a multistep, iterative coding process (Creswell and Poth, 2016). First, we used open coding to identify customers' reasons for feeling a sense of captivity and responses, as well as subsequent feelings (Corbin and Strauss, 2008). Second, by applying thematic and selective coding, as well as continuous comparisons with prior findings and literature, we refined the categorization and drew conclusions (Creswell, 2014). Thematic saturation was reached after 16 interviews; no significant additional themes were detected thereafter (Corbin and Strauss, 2008). The additional interviews provided confirmation of this thematic saturation and helped maximize the validity of the findings (see Web Appendix Table

A8 for the coding scheme).

Customers' responses to their captivity

Three categories of coping behaviors used by customers in response to their captivity emerge from the data: (1) complaining, (2) resignation, and (3) emotional support seeking NWOM.

Complaining directly to the service provider is a behavior chosen by some informants, especially those who were angry. However, despite choosing to voice their concerns directly to their service provider, they also believe that most of the time, their voice effort goes unheard, such that even if they wrote "to customer service, [and] said ... this was really appalling that I paid this amount of money and I even made the effort of booking in advance, I tried to be on time, ... and still I always ended up having an issue. So, I gave them an earful ... [but] I didn't think my voice was heard because I never got a reply" (A.T., railways). Thus, unlike the findings from noncaptivity contexts (e.g., Nyer, 2000), complaining by captive customers does not represent an effective solution to improve their well-being, due to the impression that their voice was not heard. Accordingly, their emotional state and well-being remains affected, as the following quote makes clear: "I called customer service several times, they took note and said they understood [my situation] but that they could do nothing more. We made a joint complaint but [I didn't feel] less angry" (C.P., postal services). The lack of perceived effectiveness of complaining might explain why this behavior is often complemented by other responses, such as emotional support seeking NWOM or trying to distance themselves from their captivity emotions (Fliess and Volkers, 2020).

Resignation. Some informants tried to create an emotional distance from the service, reasoning: "We had to stay. Even if we found something else cheaper, we couldn't just cancel [the subscription] like that.... Sometimes I've told myself that I'm the one who chose it. So, I had to take responsibility" (C.R., phone). When captive customers see no other alternatives, they come to

feel disengaged and resigned, or even somewhat indifferent to the situation, with the sense that "knowing that there was no competitor that provided the same service, I felt quite indifferent" (D.I., railways) or "I don't get upset if I have to go to the post office [to pick up a parcel]. It is like taking the garbage out. Something you don't like to do, but you have to" (P.C., postal services). Some informants associate resignation with the inability to change the situation, such as "I thought it was too expensive in regard to the quality of service, but I'm not able to change anything" (S.P., railways). But even when trying to distance themselves and accept the situation, captive customers are still subject to negative affect, as voiced by informants who felt "annoyed" (D.I., railways) and even "angry" (S.P., railways) because of their lack of alternatives or by this informant who admitted she felt "powerless," despite accepting her inability to "terminate her contract right away" (C.R., phone) and exit to an alternative provider, or this informant who had "a feeling of helplessness" as "there was no way to change things." (S.P. – railways). Our findings thus suggest that resignation, as a response to captivity, does not allow customers to improve their well-being. As noted by Gelbrich (2010), customers who feel helpless and lacking control often seek to release their emotions and therefore engage in support-seeking NWOM.

Emotional support seeking NWOM has been identified as the most frequent response to customer captivity, used by informants to seek emotional support from companions. NWOM notably helps captive customers vent their captivity emotions: "Immediately after that trip, I shared this negative experience with my parents, ... I wanted to externalize my frustration, formalize it so I wouldn't keep it inside" (S.M., railways). Perceiving power asymmetry and the perceived lack of efficiency of complaining, captive customers instead resort to venting to family and friends, which gives them some emotional support, such as when "I was frustrated, and I found the situation revolting. So, [sharing the experience] made me feel good to talk about it, so that people understood my situation" (T.B., phone). To mitigate their mental burden, they "seek

emotional comfort" (M.B., postal services). That is, captive customers often seem to engage in NWOM to obtain support, more than to punish or take revenge on the service provider, as explicitly indicated by one participant: "I was captive from the telecom company. I had no way to punish them!... It was nice to talk about it with friends and say words you would have liked to say to the service provider" (M.D., phone). These findings emphasize the emotional support-seeking purpose of NWOM by captive customers, which appears as a more effective solution, compared to complaining and resignation.

The effectiveness of NWOM as a solution to customer captivity

Of the three types of responses to their captivity, NWOM has thus emerged among our informants as the most frequently used and effective solution. Informants revealed that finding emotional support through NWOM allowed them to lessen the negative effect of captivity on their wellbeing by reducing their negative emotions and feelings of captivity, while also reinforcing their social ties. Even if NWOM cannot remedy to their captivity problem per se, it helps them feel better, relieved, and less frustrated or angry. For example, "I was angry and stressed, I knew that my wife was waiting for me. Being able to criticize the service with her helped me mitigate the situation" (S.R., railways). In addition, NWOM gives captive customers a sense of regained control over the service relationship and reduces their feelings of captivity, such as when one respondent claimed: "I didn't want it to happen to me or to others. [Sharing my experience allowed me to] feel as if I was regaining control, yes clearly.... And I felt relieved. Liberated is the word" (M.D., phone). Captive customers consciously or unconsciously use NWOM to feel less alone and more understood. Thus, "Even if friends didn't understand the technical problem, at least they understood the human problem and my frustration.... It didn't solve my problem, but it helped to get this frustration out by sharing it with someone" (M.D., phone). In even more blunt terms, "I felt better because I was not alone, at least not the only one who got screwed" (C.R.,

phone).

Sharing the negative experience, often while "making fun of customer service" (M.P., phone), also helped customers diminish their captivity emotions. By reinforcing social ties, NWOM mitigates the downsides of captivity to make the overall experience more positive (P.C., postal services). Customers with strong captivity feelings and emotions benefit from connecting with people who share "the same problems" and cannot do anything to solve them, such as a customer who was feeling "taken advantage of" by her mobile phone provider because of prices she considered unfair: "[I felt less upset] because I was able to talk to my neighbor and my sister who have the same problems, it helps to accept the situation" (H.K., phone). Noting that coping responses such as complaining and resignation mostly proved ineffective to relieve customers' captivity emotions and improve their well-being, NWOM, as a way for captive customers to obtain emotional support, appears therefore as a more effective solution.

General discussion and conclusion

Customer captivity, as a type of vulnerability, affects customers' service evaluation, WOM behavior, and well-being. We identify NWOM as an effective solution to help captive customers reduce the negative effects of captivity on their well-being. In that, NWOM represents a way for captive customers to seek emotional support, allowing them to vent to reduce their captivity emotions and regain some control, thus improving their well-being. Whereas NWOM has already been suggested as a possible solution by Fliess and Volkers (2020) and Rayburn *et al.* (2020), our findings go a step further to reveal its effectiveness in relation to customers' captivity emotions and well-being. Consistent with Rayburn (2015), we find that most captive customers do not remain passive but instead seek solutions and try to regain control to the extent that they can. Through this path, NWOM enables customers to feel somewhat empowered and less vulnerable.

This study makes three main contributions to extant literature. First, it contributes to

transformative service research (e.g., Anderson et al., 2013; Fisk et al., 2018; Russel-Bennett et al., 2019) and customer vulnerability literature (Commuri and Ekici, 2008; Hill and Sharma, 2020) by investigating customer captivity as a type of vulnerability that extends beyond mere dissatisfaction to affect customers' well-being. By identifying captivity emotions and unfair price perceptions as two important manifestations of customer captivity, and then disentangling the effects of these manifestations on customers' service evaluations and WOM behavior, our results demonstrate that customer captivity is a more complex concept than has been previously identified. Our perspective on NWOM in a captivity context also reveals it as an effective solution for customers to deal with captivity emotions and reduce the negative effects of their captivity on their well-being. As suggested by Hill and Sharma (2020), different types of vulnerability might require different solutions. Therefore, by focusing on this specific type of customer vulnerability, namely captivity, our study contributes to this literature by identifying solutions that are specifically adapted to this vulnerability context.

Second, we advance service marketing and relationship marketing literature by providing evidence of how customer captivity acts as a boundary condition for generic service evaluations and WOM models. Relationship marketing theory suggests that developing and maintaining long-term relationships with customers improves firms' performance (Palmatier *et al.*, 2006), but such relationships also can generate feelings of captivity among customers (Patterson and Smith, 2003), and our findings demonstrate that customers who feel captive respond negatively to relationship marketing tactics that seek to hold them captive. Customers' emotional responses to their captivity lower their service quality perceptions and satisfaction and increase their NWOM tendencies. Moreover, price unfairness perceptions related to customer captivity exacerbate customers' reactions and amplify the relationships among the focal variables. As we demonstrate empirically, using captivity emotions and price unfairness perceptions to account for customer

captivity improves the explanatory power of a generic model of customer service evaluations and WOM behavior. The context of service-related captivity thus requires adapted, dedicated theorizing.

Third, acknowledging calls for more research on emotions in service relationships (e.g., Furrer *et al.*, 2020; Liu *et al.*, 2019), our results stress the importance of negative emotions related to captivity specifically. If they believe they have no other choice than to use their current provider to obtain a service they need, customers experience negative emotions, directly associated with their captive service relationship, which affect their service evaluation and wellbeing. Recognizing and managing these captivity emotions is critical, because they can have detrimental effects on not just customer relationships but also service employees' emotional states (Liu *et al.*, 2019; McColl-Kennedy *et al.*, 2009) and service costs (Bhattacharya et al., 2020). *Managerial implications*

Despite calls for service designs that explicitly consider customer well-being (Fisk *et al.*, 2018; Johns and Davey, 2019; Rosenbaum *et al.*, 2017), many service firms have resisted and refused to change their practices, seemingly due to their indiscriminate embrace of relationship marketing strategies (Frow *et al.*, 2011). Our study shows that captivity alters customers' service evaluations, to the extent that it even might have negative effects on service firms' image and performance (Bhattacharya *et al.*, 2020; Wetzer *et al.*, 2007). When captive customers seek solutions to mitigate their negative emotions and improve their well-being, they seek emotional support and spread NWOM. Even if the primary goal of such behavior might not be to seek revenge, it is still likely to tarnish service firms' image (Leisen Pollack 2017a; Richins, 1983). Even in monopolistic situations, NWOM by customers affects service firms' profitability by increasing service costs (Bhattacharya *et al.*, 2020). Managers should recognize why captive customers spread NWOM, as well as the advantages of developing solutions that can (1) reduce

customers' feelings of captivity and (2) facilitate customers' emotional venting. These efforts could be mutually beneficial, in that they help make captive customers feel better and less vulnerable, while also reducing the negative effect of NWOM for service firms (Seiders and Berry, 1998).

First, to address customers' captivity feelings, service firms could facilitate customer empowerment (Ramani and Kumar, 2008). For example, to attenuate customers' sense that they lack choice, they could offer additional service options that reassign some control to customers in terms of when and how to obtain the service they need. Postal services in Switzerland recently introduced new delivery options that allow customers to choose their preferred time and place. Customer empowerment also might be promoted through service design and co-production initiatives (Xie et al., 2020). Another way to reduce customers' captivity feelings would involve attenuating price unfairness perceptions by enhancing price transparency (Miao and Mattila, 2007). To this end, marketing managers could increase the accessibility and visibility of their pricing practices, such as by disclosing comprehensive information about how prices are set. In parallel, consideration should be given to customers' reference prices (Kalyanaram and Winer, 1995), because price unfairness perceptions arise when customers perceive a transgression of their entitlement to an appropriate price, in favor of an exaggerated profit for the service provider (Kahneman et al., 1986). Marketing actions that influence customers' reference prices could also help decrease their unfairness perceptions.

Second, even if they take preventive measures to reduce customer captivity, service providers might not be able to avoid it completely. In these cases, they should aim to provide emotional support and encourage captive customers to vent their negative emotions through controlled company channels (Lacey, 2012). As captivity affects customers' well-being, they resort to NWOM because complaining directly to their service provider is perceived as

ineffective. Considering that NWOM represents a solution for obtaining emotional support and dealing with captivity emotions, service firms might provide ready opportunities for emotional venting and the tools to do so, such as through more accessible, multichannel customer service options (Frasquet *et al.*, 2019).

Limitations and suggestions for further research

Unlike previous studies of customer captivity that only include quantitative or qualitative data, our mixed-methods study provides richer data and more robust analyses (Harrison and Reilly, 2011; Ivankova *et. al* 2006). Still, the data are cross-sectional and do not reflect dynamic effects. We thus cannot determine if NWOM has long-term effects on customers' well-being or if the effect fades quickly. Longitudinal studies could investigate the long-term impacts of NWOM on captive customers' well-being.

A key concept in our study and a key variable in our model is price unfairness perceptions. We measured this variable with a single item, developed specifically for this study. Even if several previous studies have also relied on single-item scales to measure price unfairness, out of questionnaire length considerations (e.g., Campbell, 1999), it still raises some questions about reliability. The item, which we pretested, was easy for respondents to understand in a service captivity context, which should reduce measurement error and provide confidence in the validity of our results. Moreover, because of the captivity context of this study, we focused on one dimension of price unfairness perceptions related to customers' comparison with the value they receive (Martín-Ruiz and Rondán-Cataluña, 2008), because other points of reference, such as competitors' prices, were not relevant in a captivity context. However, other dimensions of price unfairness perceptions might have increased the coverage of the breath of the concept. For example, the price might be perceived as unfair compared to what is paid in another country in which the situation is more competitive. Thus, continued research could develop multi-

dimensional, multi-item measures of price unfairness perceptions for customer captivity contexts.

We focused on customers and their data; it might be relevant to study customer captivity from the service provider's point of view too. Even though customer captivity results from an imbalance in the power–dependence relationship between customers and service providers, in service relationships, customers' well-being is co-created (Chen *et al.*, 2020) and requires the participation of the service provider. From a transformative service research perspective, it is critical to investigate how service providers and their frontline representatives can reduce customers' feelings of captivity and improve their well-being. In particular, an effective process requires a better empirical understanding of the trade-offs for service providers, between the benefits of holding customers captive and the costs of their NWOM. Besides, expanding the dyadic relationship between service providers and captive customers, the role of other actors from the service ecosystem should be considered as well. Future research could notably examine how service mediators (Johns and Davey, 2019), such as consumer associations or governmental agencies, could be engaged in the co-creation of solutions for captive customers.

Finally, we propose that customer captivity is a specific type of vulnerability. Hill and Sharma (2020) argue that different types of vulnerability might elicit different responses from customers and hence require adapted solutions. Thus, a relevant research effort might seek to test if our findings apply to other types of vulnerability (e.g., poverty, health, handicap, racial minority). Key considerations revolve around whether other types of vulnerability affect customers' service evaluations too, whether NWOM can provide solutions, and whether other coping responses could be more effective—all avenues for continued research.

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Table 1. Sample Characteristics

	Railway services	Postal services	Mobile phone services	Total
Gender (% women)	50.8	48.9	50.0	49.9
Age (Mean / SD)	53.4 / 17.5	54.0 / 15.9	51.6 / 15.7	53.0 / 16.3
Education (Mean / SD)	3.4 / 1.1	3.3 / 1.2	3.4 / 1.1	3.4 / 1.2
Income (Mean / SD)	2.5 / 1.2	2.5 / 1.2	2.5 / 1.2	2.5 / 1.2
N	327	352	338	1'017

Notes: SD = standard deviation. Education: 1 = primary school, 2 = secondary school, 3 = high school, 4 = bachelor degree, 5 = master degree, 6 = Ph.D. degree. Income, measured monthly: 1 = less than CHF 4,500; 2 = between CHF 4,500 and CHF 7,999; 3 = between CHF 8,000 and CHF 10,999, 4 = between CHF 11,000 and CHF 14,000, and 5 = more than CHF 14,000. CHF 1 = US\$1.03.

Table 2: Descriptive Statistics, Construct Reliability, and Correlation Matrices

	Mean	Standard deviation	Cronbach's alpha	Construct reliability	1.	2.	3.	4.
Railway services ($n = 327$)								
1. Perceived quality	6.99	1.08	.93	.93	.73			
2. Satisfaction	7.20	1.79	.90	.91	.49	.84		
3. Negative word of mouth	2.37	1.58	.91	.91	47	64	.83	
4. Captivity emotions	3.62	2.04	.87	.87	33	48	.58	.79
5. Price unfairness perceptions	7.50	1.65	_	_	14	23	.28	.25
Postal services $(n = 352)$								
1. Perceived quality	7.46	1.15	.94	.94	.75			
2. Satisfaction	7.06	1.80	.89	.89	.43	.82		
3. Negative word of mouth	2.67	1.72	.88	.89	43	70	.78	
4. Captivity emotions	3.58	2.12	.89	.89	36	40	.52	.82
5. Price unfairness perceptions	5.83	2.29	_	_	34	31	.27	.32
Mobile phone $(n = 338)$								
1. Perceived quality	6.89	1.26	.94	.94	.76			
2. Satisfaction	7.32	1.53	.85	.86	.49	.78		
3. Negative word of mouth	2.56	1.59	.88	.87	55	.59	.77	
4. Captivity emotions	3.82	2.18	.85	.85	32	35	.39	.77
5. Price unfairness perceptions	6.91	2.05	_		24	30	.26	.23

Notes: Means are weighted means, using factor loadings as weights to account for measurement errors. All correlation coefficients are significant at 5%. Square roots of the average variance extracted are in bold on the diagonals.

Table 3a. Results of the Mediation and Moderated Mediation Analyses

Railway services	Service quality		Satisfaction		Negative word of mouth		
	Coeff. (s.e.)	95% CI	Coeff. (s.e.)	95% CI	Coeff. (s.e.)	95% CI	
1. Baseline model (simple mediation)			-		-		
Service quality	_		.816***	.658, .974	297^{***}	435,160	
			(.080)		(.070)		
Satisfaction		_	_	_	480^{***}	563, .398	
					(.042)		
			$R^2 = .241$		$R^2 = .445$		
			$F_{(1,325)} = 103$.418, <i>p</i> < .001	$F_{(2,324)} = 129.846, p < .001$		
2. Serial mediation model							
Captivity emotions	173***	227,118	318***	399,237	.253***	.185, .320	
1 7	(.028)	,	(.041)	,	(.034)	,	
service quality		_	.619***	.465, .773	241 ^{***}	369,113	
1 3			(.078)	,	(.068)	,	
Satisfaction	_	_		_	357***	441,274	
					(.042)	,	
	$R^2 = .107$		$R^2 = .359$		$R^2 = .525$		
	$F_{(1,325)} = 38.9$	900, p < .001	$F_{(2,324)} = 90.659, p < .001$		$F_{(3, 323)} = 119.106, p < .001$		
2. M. J							
3. Moderated mediation model			298***	200 216	.239***	172 205	
Captivity emotions (as control)	_	_		380,216		.173, .305	
G' 1'4			(.042) .609***	457 761	(.034)	247 007	
Service quality	_	_		.457, .761	222*** (064)	347,097	
C 1; C 1;			(.077)		(.064) 334***	416 252	
Satisfaction	_	_		_		416,252	
Dries varfairmess managations			104*	201 026	(.042) .093*	010 166	
Price unfairness perceptions	_	_	104* (.049)	201,036	(.038)	.019, .166	
Duit and Calman and Calman and Calman			(.049) .081*	.006, .157	(.038) 013	076 040	
Price unfairness perc. × Service quality	_	_		.000, .13/		076, .049	
D.: C: C-t' C t'			(.039)		(.032) 083***	127,039	
Price unfairness perc. × Satisfaction	_		_	_	083 (.022)	127,039	
			D 2 —	: 377		557	
			$R^2 = .377$ $F_{(4,322)} = 48.683, p < .001$			$R^2 = .557$ $F_{(6, 320)} = 67.015, p < .001$	
			$I^{*}(4,322) = 40.$	005, p < .001	$I^{*}(6,320) = 07.$	015, p > .001	

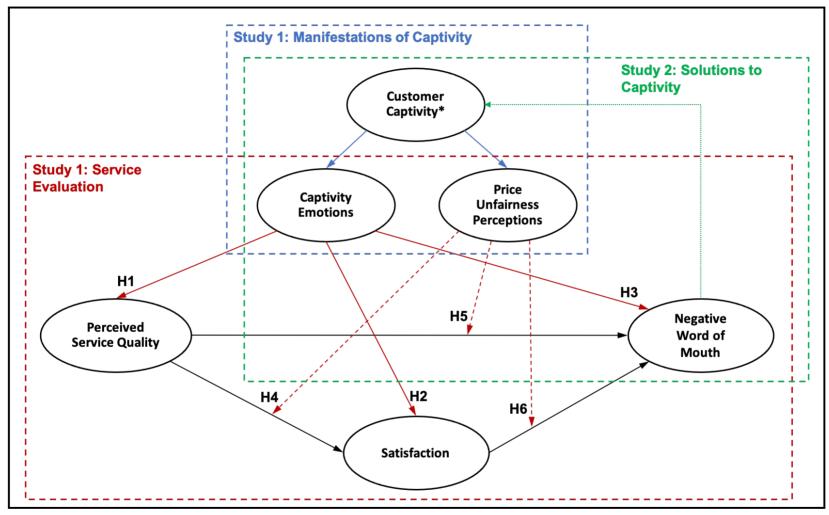
Table 3b. Results of the Mediation and Moderated Mediation Analyses

Postal services	Service quality		Satisfaction		Negative word of mouth	
	Coeff. (s.e.)	95% CI	Coeff. (s.e.)	95% CI	Coeff. (s.e.)	95% CI
1. Baseline model (simple mediation)	, ,		, ,		, ,	
Service quality			.669***	.520, 818	235***	356,113
•			(.076)		(.062)	
Satisfaction		_	_	_	601***	679, .523
					(.040)	
			$R^2 = .182$		$R^2 = .508$	
			$F_{(1, 350)} = 78.$	089, <i>p</i> < .001	$F_{(2, 349)} = 179.795, p < .001$	
2. Serial mediation model						
Captivity emotions	196***	250,143	237***	321,154	.211***	.148, .275
cup it its concursion	(.027)	.200, .1.0	(.042)	1021, 1101	(.032)	,,
service quality	_	_	.512***	.358, .665	143*	262,025
service quanty			(.078)	1000,1000	(.060)	.202, .020
Satisfaction			_	_	523***	604,451
Savistaet is in					(.039)	,
	$R^2 = .130$		$R^2 = .249$		$R^2 = .562$	
	$F_{(1,350)} = 52.4$		$F_{(2, 349)} = 58.123, p < .001$		$F_{(3,348)} = 148.569, p < .001$	
		•		•		•
3. Moderated mediation model						
Captivity emotions (as control)			212***	297,127	.216***	.152, .279
• • •			(.043)		(.033)	
Service quality			.463***	.305, .621	171**	292,049
			(.080)	•	(.062)	
Satisfaction				_	515 ^{***}	592,437
					(.040)	
Price unfairness Perceptions			097^{*}	177,016	011	070, .049
•			(.041)		(.030)	
Price unfairness perc. × Service quality			027	090, .037	.011	041, .063
1 1			(.032)	•	(.027)	-
Price unfairness perc. × Satisfaction	_	_		_	049**	081,017
1					(.016)	-
			$R^2 =$: .267		.574
			$F_{(4,347)} = 31.$	513, <i>p</i> < .001	$F_{(6, 345)} = 77.$	618, p < .001

Table 3c. Results of the Mediation and Moderated Mediation Analyses

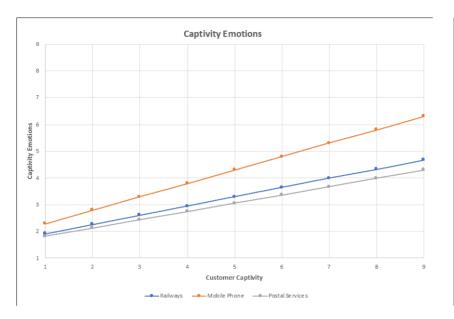
Mobile phone services	Service quality		Satisfaction		Negative word of mouth	
	Coeff. (s.e.)	95% CI	Coeff. (s.e.)	95% CI	Coeff. (s.e.)	95% CI
1. Baseline model (simple mediation)					· ·	
Service quality	_	_	.597***	.483, .710	432^{***}	549,315
•			(.058)		(.060)	
Satisfaction	_	_	_	_	439***	535, .343
					(.049)	
			$R^2 = .241$		$R^2 = .437$	
			$F_{(1,336)} = 106$.501, <i>p</i> < .001	$F_{(2,335)} = 130$.108, p < .001
2. Serial mediation model						
Captivity emotions	185***	244,126	152***	219,084	.118***	.055, .181
1 5	(.030)	, -	(.034)	.,	(.032)	,
service quality			.513***	.396, .629	392 ^{***}	509,276
1 3			(.059)	,	(.059)	,
Satisfaction	_	_		_	396***	493,299
Sudstaction					(.049)	
	$R^2 = .103$		$R^2 = .283$		$R^2 = .459$	
	$F_{(1,336)} = 38.$	403, <i>p</i> < .001			$F_{(3, 334)} = 94.613, p < .001$	
3. Moderated mediation model						
Captivity emotions (as control)	_	_	130***	198,063	.108***	.045, .171
			(.034)		(.032)	
Service quality	_	_	.459***	.341, .577	369***	484,253
			(.060)		(.059)	
Satisfaction	_	_	_	_	364***	463,265
					(.050)	
Price unfairness perception	_	_	126***	195,056	.034	030, .100
			(.035)		(.033)	
Price unfairness perc. × Service quality	_	_	.046	009, .101	074^{*}	131,016
-			(.028)		(.029)	
Price unfairness perc. × Satisfaction	_	_	_	_	030	076, .015
-					(.023)	
			$R^2 = .313$		$R^2 = .483$	
			$F_{(4,333)} = 37.$	880, p < .001	$F_{(6,331)} = 51.4$	478, <i>p</i> < .001

Figure 1. Conceptual Framework



^{*}In this framework, customer captivity is conceptualized as a type of customer vulnerability

Figure 2. Captivity Emotions and Price Unfairness Perceptions as Manifestations of Customer Captivity



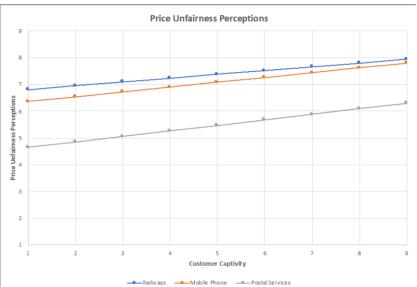
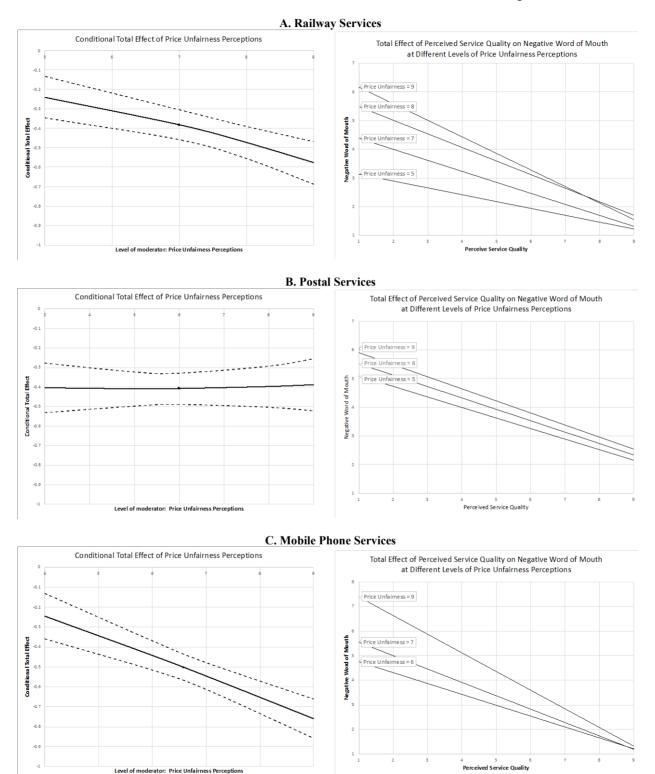


Figure 3. Analysis of the Conditional Total Effects of Perceived Service Quality of Negative Word of Mouth at Different Levels of Price Unfairness Perceptions



Notes: Plots are based on unstandardized coefficients. Left panels: Dashed lines represent the 95% confidence bands. For any moderator values for which the confidence bands do not contain zero, the conditional total effect is significantly different from zero. Dots represent the conditional total effects at the mean value of the moderator (Spiller *et al.*, 2013). Right panels: Regression lines of the total effect of the independent variables on the depenent variable at different level of the moderator (Hayes, 2018).

¹ Rayburn (2015) uses the term "service captivity" to label the concept of customer captivity in service contexts. We prefer the term "customer captivity," because it better highlights the idea that it is customers who feel captive.

² We ran the analysis with average scores, and the results (available from the first author) do not significantly differ.

We also ran moderated serial mediation models (Hayes, 2018, Model 92) with captivity emotions as the independent variable, perceived service quality and satisfaction as mediators, and prince unfairness perceptions and NWOM as dependent variables (see Web Appendix A6). Compared with the moderated mediation models with captivity emotions as a control variable, these models add the interactions between price unfairness perceptions and captivity emotions. However, these interactions are not significant in any of the service industries, with the exception of the effect of the interaction on satisfaction in the mobile phone industry. The moderated serial mediation models do not provide additional explanatory power and are less parsimonious, so we retain the moderated mediation model with captivity emotions as a control variable for our final models.