



Is there no integrity or competence? Effects of co-production of service recovery according to type of failure

¹Danúbia Reck
²Ivair Franceschetto
³Lais Rech
⁴Natália Araujo Pacheco
⁵Rafael Luis Wagner

Abstract

Objective: Service failures are common and, therefore, several studies investigate service recovery tactics. A recently investigated tactic which requires further studies is the co-production of recovery (i.e., consumer participation). This study investigates the effects of co-production of service recovery after situations involving integrity and competence failures.

Method: Experimental study with 131 participants, with factorial design 2 (co-production: with; without) x 2 (type of failure: integrity, competence).

Originality: Recent studies adopt co-production as a service recovery strategy after a failure. However, it is not known whether the type of failure (integrity or competence) influences the co-production effects of service recovery.

Results: Consumers who co-produce service recovery after an integrity failure experience more anger than consumers who do not co-produce. In addition, consumers who co-produce recovery after an integrity failure have less intention to return and are less likely to have a positive word-of-mouth than those who do not co-produce after a competence failure.


Theoretical contributions: This study expands knowledge regarding co-production in service recovery by addressing its effects on consumer behavior according to the type of failure, which is something that has not been studied before.


Managerial contributions: This study shows that co-production in service recovery works best to recover competence rather than integrity failures. That is, companies should only invite the consumer to co-produce if failure is caused by lack of competence, not integrity.


Keywords: Co-production; Service Failure; Recovery of services; Competence; Integrity.


How to cite this article


Reck, D., Franceschetto, I., Rech, L., Pacheco, N. A., & Wagner, R. L. (2019). Is there no integrity or competence? Effects of co-production of service recovery according to type of failure. *Brazilian Journal of Marketing*, 18(2), 224-242. <https://doi.org/10.5585/remark.v18i2.4020>

¹ Faculdade Meridional – IMED, Rio Grande do Sul (Brasil).  <https://orcid.org/0000-0003-2637-8231>
E-mail <reckdanubia@gmail.com>

² Faculdade Meridional – IMED, Rio Grande do Sul (Brasil).  <https://orcid.org/0000-0002-0724-9285>
E-mail: <Ivair.franceschetto@hotmail.com>

³ Faculdade Meridional – IMED, Rio Grande do Sul (Brasil).  <https://orcid.org/0000-0002-6950-2418>
E-mail: <lais_rech@yahoo.com.br>

⁴ IPAM & Universidade Europeia, Lisboa (Portugal); IMED Business School, Rio Grande do Sul (Brasil).  <https://orcid.org/0000-0001-5607-9326> E-mail <natalia.pacheco@imed.edu.br>

⁵ Faculdade Meridional – IMED, Rio Grande do Sul (Brasil).  <https://orcid.org/0000-0001-7556-7069>
E-mail: <rwagner094@gmail.com>



1 Introduction

Service failures are common and proof of this is the high number of consumer complaints in social media, complaint sites, and PROCON - Programa de Proteção e Defesa do Consumidor (Consumer Protection and Defense Program). Service failures lead to negative consequences, such as anger and retaliation (Joireman, Grégoire, Devezer, & Tripp, 2013), and companies need to recoup such failures to eliminate or mitigate such consequences. Service recovery refers to strategies companies use in response to a service failure (Hart, Heskett, & Sasser, 1990). Among the different service recovery strategies that can be adopted are: the apology, the promise that failure will not occur again, financial compensation, and co-production (Dong, Evans, & Zou, 2008; Hazée, Van Vaerebergh, And Armirotto, 2017, Joireman et al., 2013, Kim, Cooper, Dirks, & Ferrin, 2013, Vázquez-Casielles, Iglesias, & Varela-Neira, 2017).

Co-production of service recovery consists of consumer participation in creating a solution to the failure (Dong et al., 2008). Namely, the consumer works with the company to recover the service. This participation can occur through the exchange of ideas and decisions about how the service should be recovered (Dong et al., 2008; Hazée et al., 2017). According to Hazée et al. (2017), co-production in service recovery has recently been investigated and the literature lacks research that examines how co-production of service recovery can affect consumer reactions.

One aspect to be discussed concerning co-producing service recovery, is whether any kind of failure can benefit from co-production. One type of failure to consider in this context is integrity failure. Integrity is a group of acceptable beliefs of the other party, amongst these beliefs are honesty and fair treatment (Dietz & Hartog, 2006). A failure of integrity occurs when the consumer realizes the company does not adhere to a set of principles considered ethical or acceptable (Mayer & Davis, 1999). Another type of failure to consider would be the failure of competence. Competence refers to the competences and knowledge that compel a party be able to comply with an agreement (Dietz & Hartog, 2006). A competence failure occurs when the company's competence is lacking that allows the domain of something (Mayer & Davis, 1999).

Inviting a consumer to co-produce a service recovery when the failure occurred due to a company's lack of ethical principles (e.g., caused by the company's excessive greed) could have

effects different from those of inviting a consumer to co-produce a recovery of when the failure occurred due to lack of competence of the company. In the first case, the consumer may be angry at the fact that the company asks for its contribution to solve a problem that it could have avoided if it acted ethically. In the second scenario, the consumer may feel that co-production is advantageous for him or her. It can act to compensate for the company's inability to achieve the desired result. These different reactions, due to the origin of the service failure, can alter consumer behavioral consequences such as return intention and positive word-of-mouth. To date, no studies have been found investigating whether the effects of co-producing service recovery depend on the type of failure (e.g., integrity failure or competence failure).

By understanding how different types of service failure impact behavioral intent of consumers, managers can understand under what circumstances letting the consumer co-produce can be beneficial or harmful. Although previous literature indicates co-production is an important tool in the recovery of service failures, the results of this study may show that the effectiveness (or not) of co-production, as a service recovery tactic, depends on the type of fault committed by the company.

Given the significance of recovery of services and the possible implications of the type of failure for the co-production of services, this study aims to verify effects of co-production of service recovery on emotional and behavioral reactions of consumers (i.e., anger, likeliness to return, and positive word-of-mouth), investigating whether the type of failure (integrity vs. competence) influences the effects of co-production.

2 Theoretical framework

2.1 Service Failures

In terms of service provision, considering the characteristics of variability, intangibility and inseparability (Levesque & McDougall, 2000), and considering the high involvement of human element in most service organizations, failures are inevitable (Boshoff, 1997). Failure to provide

services corresponds to insufficient performance when compared to customer expectations (Hess, Ganesan & Klein, 2003; Holloway & Beatty, 2003).

Service failures can trigger feelings of anger and frustration among consumers (Roseman, 1991), as well as provoke retaliatory responses (Grönroos, 1995). According to Fullerton and Punj (1993), this retaliation can cause financial damage to institutions and physical and psychological damage to their employees. Failures also lead to consumer dissatisfaction, which culminates in negative word-of-mouth and reluctance to repeat purchase, which may undermine the company's reputation and profitability (Johnston & Hewa, 1997).

In this setting, it is critical that companies take immediate action to recover the service after a failure. According to Zemke and Bell (1990), efficient service recovery helps consumers to have a favorable image of the company. There is evidence that the recovery of a service has the capacity to turn frustrated and angry clients into loyal ones (Berry & Parasuraman, 1992).

There are different types of failure, such as process and result failures (Smith, Bolton, & Wagner, 1999), and integrity and competence failures (Basso & Pizzutti, 2016). This article focuses on the flaws of integrity and competence. In literature regarding trust, competence is related to the perception that the entrusted possesses the technical competencies required for a task (Butler & Cantrell, 1984; Kim, Ferrin, Cooper & Dirks, 2004). Integrity is defined as the perception of the adherence of the trusted to a set of norms and principles considered important by the one who trusts (Mayer, Davis, & Schoorman, 1995; Kim et al., 2004).

After a failure, companies can adopt different forms of service recovery, such as explanation, excuse, assistance, and compensation (Davidow, 2000). Another way to recover from a failure is to offer the client the possibility of co-producing the recovery (Dong et al., 2008).

2.2 Co-production in service recovery

When a service failure occurs, consumers can participate in co-producing the solution through specific competencies and knowledge (Dong et al., 2008). Participation in co-production can benefit consumers, who through this process, tend to be more satisfied (Dong, Sivakumar,

Evans, & Zou; 2016). The company can also benefit, since with the participation of the consumers, can reduce resources used in the recovery of services (Dong et al., 2016).

When the company offers co-production of service recovery, consumers perceive greater justice, report greater satisfaction, and intend to repurchase in the future (Xu, Marshall, Edvardsson, & Tronvoll, 2014). Xu et al. (2014), argue that companies that take initiative to start recovering services by co-producing can generate positive customer perceptions and experiences more favorable to recovery.

For Roggeveen, Tsiros and Grewal (2012), co-production as a recovery strategy improves clients' evaluations (i.e. satisfaction) of the service recovery process. When they are co-producing service recovery, consumers may believe they have the ability to shape final results, which may increase repurchase intent (Roggeveen et al., 2012).

Customer participation in the production and delivery of a service (i.e. outside the context of service recovery) can enhance the brand image and lead to greater loyalty to the service provider and to likelihood of repurchase and return intent, (Mustak, Jaakkola, Halinen, & Kaartemo, 2016), and the same can occur in a service recovery situation. Vázquez-Casielles et al. (2017), indicate that co-production in the recovery of a failure improves the intention of repurchase and the word of mouth, variables that are related to the loyalty of the clients.

However, such effects of co-production on repurchase intent and positive word- of-mouth may depend on the type of failure that has occurred (i.e., integrity failure or competence failure). In general, people tend to value integrity more to the detriment of competence (Leach, Ellemers, & Barreto, 2007; Wojciszke, Bazinska, & Jaworski, 1998). Kim et al. (2004). have shown that trust after a competence gap is more easily recovered through an apology, while after a breach of integrity, trust is more easily recovered through the denial of fault. This suggests that individuals are highly averse to integrity failures, but more easily tolerate competence failures. Following this logic, after the failure of integrity, the consumer may be less interested in co-producing service recovery than after a competence failure. In the case of the co-production of service recovery after a failure of integrity, the consumer is working with a company that has failed the service because of an unethical issue (i.e., greed).

Even if the consumer obtains a satisfactory service recovery, nothing prevents the company from making the same failure on purpose. That is, the co-production by the consumer does not soften the fact that the company is unethical. On the other hand, in the case of the co-production of service recovery after a lack of competence, the co-production by the consumer compensates for the lack of competence of the service provider and the lack of competence does not fit as done purposely. In this sense, it is possible that the positive effects of co-production on the intention of repurchase and on positive word-of-mouth, as reported by Roggeveen et al. (2012), and Vázquez-Casielles et al. (2017), are lower after an integrity failure compared to a competence gap. Therefore, the following hypotheses are formulated:

H1: Co-production of service recovery after a competence failure will lead to greater repurchase intent than co-production after an integrity failure.

H2: Co-production of service recovery after a competence failure will lead to more positive word-of-mouth than co-production after an integrity failure.

Service failures can trigger anger when consumers blame external sources (Roseman, 1991). Anger is a negative emotion that is associated with the desire to face the source of the problem (Averill, 1983; Yi & Baumgartner, 2004). For Bonifield and Cole (2007), anger is a feeling of displeasure or hostility associated with the desire to attack the source of anger. After situations of service failure, angry consumers are more prone to retaliatory behavior and less likely to engage in negotiations with the culpable party (Kalamas, Laroche, & Makdessian, 2008).

Consumers tend to feel angry at a company if they realize that it could have avoided a failure, but it failed to do so through negligence (Weiner, 2000). The flaw in integrity can be seen as something that could have been avoided if the company acted in a more ethical way. That is, if the failure is caused by the company's excessive greed, consumers may feel anger at it by thinking that it is neglecting the service to prioritize its earnings. In the case of a company's lack of ability to deliver an adequate service (i.e., competence failure), consumers may see this as something the company cannot avoid. That is, it does not occur through the negligence of the company, which leads consumers to feel less anger than in the case of failure of integrity. In view of this, the following hypothesis is formulated:

H3: Following an integrity failure situation, co-production as a service recovery will lead to higher levels of anger than co-production after a competence failure.

3 Method

3.1 Design and participants

An experiment was performed, manipulating co-production and the type of failure by means of a factorial design 2 (co-production vs. non-co-production) x 2 (integrity vs. competence). A total of 139 subjects were randomly assigned to each study condition. However, 8 atypical observations (outliers) were identified in the return intention and positive word-of-mouth variables, by means of the calculation of the standard score ($Z > |3|$). These cases were excluded from the sample; thus, the final sample was 131 subjects. Units from the experimental groups ranged from 29 to 37 participants. The sample of this study is classified as non-probabilistic and the sampling technique used was for convenience. Of the 131 questionnaires applied, 74.8% of the respondents were female, and the mean age was 32 years ($\sigma = 9.60$).

3.2 Procedures

Through social networks, participants received the link for research participation. The study had as context the service of hotels and the scenarios were similar to that developed in the study of Roggeveen et al. (2012), and the manipulations were carried out via texts. Participants were invited to imagine a situation of lodging in a hotel in which they had made the reservation in advance. The fault occurred when the guest arrived at the hotel and the reservation was not available.

The type of fault was handled using complaints from other customers about the hotel, saying that failure usually occurs due to lack of organization and ineptitude of the hotel (lack of competence) or lack of hotel ethics (integrity failure). The co-production of the recovery of the fault was handled by informing that the hotel attendant decided alone (without co-production) or together with the participant (with co-production), the hotel to which the same would be transferred

without having to pay for transportation. The texts used in the manipulations are available in Table 1.

Table 1 - Scenarios used in the study

Competence failure	Integrity failure
Imagine you are on a trip and after a few hours flight you arrive at the hotel that you had booked in advance and go straight to reception to check in. At the reception desk, the hotel employee informs you that your room is not available. You then show the booking confirmation you received from the hotel, but the clerk insists that no rooms are available. You ask the employee to call the manager to resolve the situation. While you wait for the arrival of the manager, you decide to seek more information about the hotel on a complaints website. When reading reviews of other customers, you find that there have previously been cases similar to yours due to lack of organization and incompetence of the hotel to make the reservations correctly.	Imagine you are on a trip and after a few hours flight you arrive at the hotel that you had booked in advance and go straight to reception to check in. At the reception desk the hotel employee informs you that your room is not available. You then show the booking confirmation you received from the hotel, but the clerk insists that no rooms are available. You ask the employee to call the manager to resolve the situation. While you wait for the arrival of the manager, you decide to seek more information about the hotel on a complaints website. When you read reviews from other clients, you find that there have previously been cases similar to yours because of hotel's lack of ethics, which usually passes the reservations to other people who pay more for the room.
With co-production	Without co-production
When the manager comes to talk to you, he informs you that he will make a reservation at another similar hotel. He shows you on the computer a few options from nearby hotels and you decide together which hotel you will be transferred with at no cost of transportation for you.	When the manager arrives to talk to you, he informs you that he will make a reservation at another similar hotel. He looks at the computer for a few options from nearby hotels and tells you which hotel you will be transferred to at no cost to you.

Source: the authors

3.3. Measures

To check for failure handling, participants were asked whether the fault was due to competence or integrity. The co-production manipulation check was done through three items ($\alpha = 0.848$, i.e., “I participated actively in problem solving”) on a 7-point scale (I totally disagree) and was adapted from the studies of Heidenreich, Wittkowski, Handrich and Falk (2015), and Chan, Yim and Lam (2010). Participants were also asked to indicate the level of realism of the scenarios (“The situation described in the text is realistic”) on a 7-point scale (I strongly disagree).

The intention to return was measured by three items adapted from the study by Zeithaml, Berry and Parasuraman (1996), ($\alpha = 0.842$, i.e., “In the future, I intend to stay again in this hotel”), Positive growth was measured using two items adapted from the study by Maxham and Netemeyer (2002), ($\alpha = 0.865$, i.e., “I would speak well of this hotel to other people”). Anger was measured through two items ($\alpha = 0.952$, i.e., “I’m feeling angry”) adapted from the study by Yi and Baumgartner (2004). All variables were measured on a 7-point scale. At the end of the questionnaire, demographic data (age and gender) were collected. Scale items are presented in Appendix 1.

4 Results

4.1 Normality tests and choice of statistical tests

Normality tests help to verify that parametric tests are best suited for data analysis (Hair, Black, Babin, Anderson, & Tatham, 2009). To do so, two normality tests (Kolmogorov-Smirnov and Shapiro-Wilk) were performed with the variables return intention, positive word-of-mouth intention and anger level. Both indicated that the data did not follow the normal distribution for the three variables ($p < 0.05$).

However, there is no non-parametric test that replaces the Analysis of Variance (ANOVA) of two factors, between subjects (Pallant, 2007). Thus, although the data did not follow the normal distribution, the two-way ANOVA was used to compare the differences in the means of the dependent variables.

4.2 Manipulation Checks

The analysis of variance (ANOVA) was performed. The average co-production for participants in the condition without co-production ($M_{\text{no co-production}} = 2.55$) was significantly lower than the average for participants in the co-production condition ($M_{\text{co-production}} = 4.17$, $F(1, 130) = 42.287$, $p < 0.001$).

The type of failure was checked using the chi-square test ($\chi^2 = 55,175$; d.f. = 1; $p < 0.001$). Specifically, 83.6% of respondents answered that the failure had occurred due to lack of ethics and integrity when exposed to the integrity scenario, and 81.4% of respondents answered that the failure had occurred due to lack of organization and incompetence of the hotel in the competence failure scenario. Thus, the manipulations were effective.

Besides checking the co-production manipulation and the type of failure, the realism of the situation presented in the scenarios was verified ($M = 5.18$, $\sigma = 9.60$). By means of ANOVA, it was verified that the averages were higher than the mean point of the scale (4) in all the experimental conditions, there was no main effect of both co-production ($F(1, 130) = 0.158$, $p = 0.691$), and of the type of failure ($F(1, 130) = 2.927$, $p = 0.089$). The interaction between the two variables ($F(1, 130) = 0.854$, $p = 0.357$) was also not observed, indicating that all the study scenarios were perceived as realistic.

4.3 Hypothesis Testing

Results of ANOVA with two factors (co-production and type of failure) show that there was interaction of co-production with the type of failure for the variable of intention to return ($F(1, 130) = 4.730$, $p < 0.05$). The results indicate that in the co-production condition, the mean return intention for competence failures was significantly higher than the mean in the integrity failure ($M_{\text{competence}} = 1.53$, $M_{\text{integrity}} = 1.14$, $F(1, 130) = 3,964$, $p < 0.05$), providing support for H1. In the condition without co-production, there was no significant effect of the type of failure to return intention ($M_{\text{competence}} = 1.31$, $M_{\text{integrity}} = 1.51$, $F(1, 130) = 1,126$, $p = 0.291$). Figure 1 shows the interaction between variables, while Table 1 shows the descriptive statistics of the dependent

variable (return intention) by independent variables (co-production: present or absent, type of failure: integrity or competence).

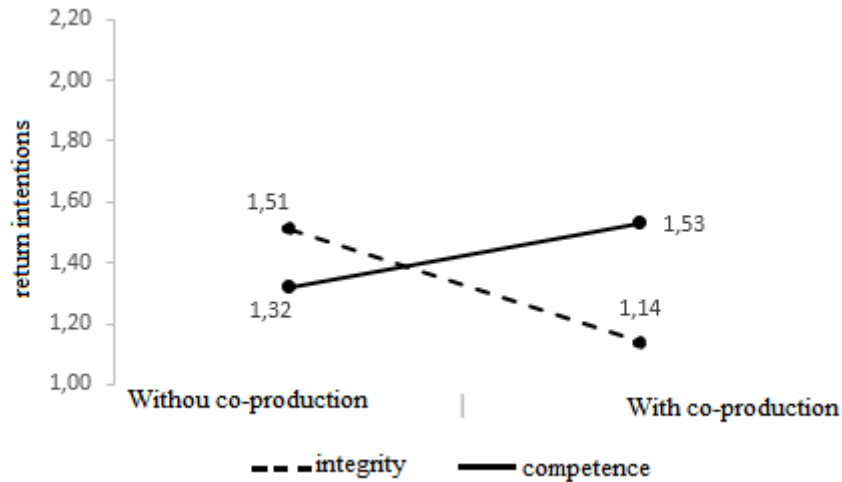


Figure 1 - Effect of interaction between co-production and failure type on return intention

Table 2 - Descriptive statistics of the return intention variable

Co-production	Type of failure	Mean	SD
Present	Integrity	1,14	0,93
	Competence	1,53	1,22
Absent	Integrity	1,51	1,35
	Competence	1,31	0,97

Also evaluated was the interaction of co-production with the type of failure for the positive word-of-mouth variable ($F(1, 127) = 6.402, p < 0.05$). Specifically, in the co-production condition, the word-of-mouth average for competence failures was significantly higher than the mean word-

of-mouth on integrity failure (M competence = 2.16, M integrity = 1.34, $F(1, 127) = 11.364$, $p < 0.01$), offering H2 support. In the condition without co-production, there was no significant effect of the type of failure (M competence = 1.58, M integrity = 1.60, $F(1, 127) = 0.015$, $p = 0.903$). Figure 2 shows the interaction between the variables, while Table 2 shows the descriptive statistics of the dependent variable (positive word-of-mouth intention) by independent variables (co-production: present or absent, type of failure: integrity or competence).

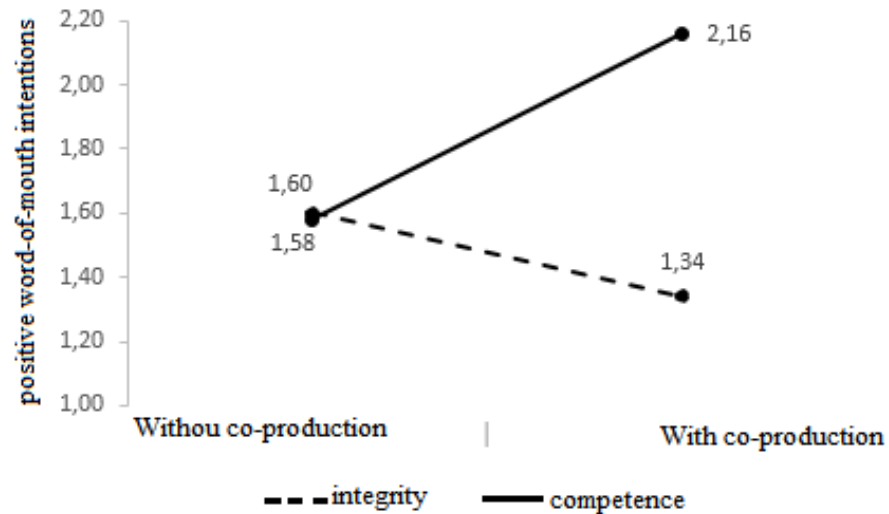


Figure 2 - Effect of the interaction between co-production and positive word-of-mouth intentions

Table 3 - Descriptive statistics of the positive word-of-mouth intention

Co-production	Type of failure	Mean	SD
Present	Integrity	1,34	0,53
	Competence	2,16	0,92
Absent	Integrity	1,60	1,15
	Competence	1,58	0,99

Finally, the interaction of co-production with the type of failure for the variable anger was also significant ($F(1, 127) = 6.031, p < 0.05$). Contrary to what H3 predicted, in the co-produced condition, there was no significant difference in mean anger for integrity failure and competence failure, with no support for H3. However, in the integrity failure condition, there was a significant effect of co-production ($M_s = \text{co-production} = 4.64, M \text{ with co-production} = 5.78, F(1, 127) = 6.342, p < 0.05$). Co-producing service recovery after a integrity failure leaves the consumer with more anger than not co-producing. In the condition of competence failure, there was no significant effect of co-production ($M \text{ no co-production} = 5.44, M \text{ with co-production} = 5.06, F(1, 127) = 0.813, p = 0.369$). Figure 3 shows the interaction between the variables, while Table 3 shows the descriptive statistics of the dependent variable (anger) by the independent variables (co-production: present or absent, type of failure: integrity or competence).

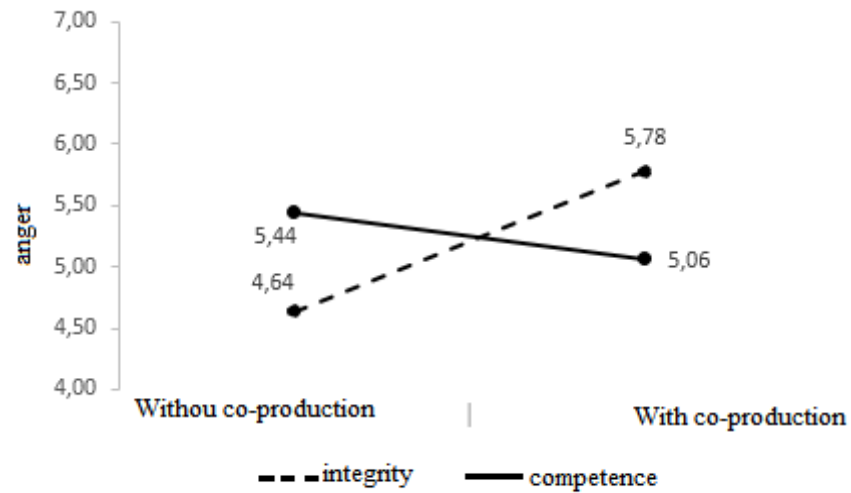


Figure 3 - Effect of the interaction between co-production and type of anger failure

Table 4 - Descriptive statistics of the variable anger

Co-production	Type of failure	Mean	SD
Present	Integrity	5,78	0,73
	Competence	5,06	0,24
Absent	Integrity	4,64	1,09
	Competence	5,44	0,58

5 Discussion

The results of the study demonstrate that co-production of service recovery leads to greater intention to return and positive word of mouth when the failure occurs by competence rather than integrity, supporting H1 and H2. This demonstrates that for loyalty aspects, co-production as service recovery may be more effective in competence failures than in integrity failures. These results amplify the findings of Mustak et al. (2016), which indicate that co-production can lead to greater loyalty to the service provider, inserting the type of failure as an interference variable in this relation. The results also reinforce results found by Roggeveen et al. (2011), and Vázquez-Casielles et al. (2017), which exhibit a positive effect of co-production on satisfaction, repurchase intent and word-of-mouth.

Additionally, the role of anger as a dependent variable was tested. Although there is no support for H3, the results contribute vastly on theoretical and managerial levels, since they show that co-producing the service recovery after a failure of integrity increases consumer's anger, something that does not happen when it does not co-produce the recovery. This result clearly shows that co-production may not be beneficial after a failure of integrity, since anger is associated with undesirable behaviors, such as desire for consumer retaliation (Joireman et al., 2013). Roggeveen et al. (2011), suggest that in some situations, co-production is not always seen as positive because clients may relate it as a form of work and this may negatively affect their evaluations.

6. Final considerations

The present study reached its objective of verifying the effects of co-production of service recovery on consumer reactions (i.e., anger, intention to return, and positive word-of-mouth intention), while additionally investigating whether the type of failure (integrity vs. competence) influences the effects of co-production. This study contributes to the literature by investigating the interaction of recovery co-production with the type of failure, something that had not been explored in previous studies. Based on the results found in the present study, it is also suggested that

companies do not invite consumers to co-produce service recovery when consumers are likely to interpret the failure as a failure of integrity.

This study has some limitations. First, although manipulation checks have been shown to be effective, simulated experiments with texts have the risk of reflecting only a planned behavior, which does not necessarily correspond to the behavior that the consumer would adopt if the same situation were repeated in the real world. In addition, there is a contextual limitation, since the experimental study of this article verified only the impacts of co-production in the recovery of service failures in the hotel context. In this way, it is suggested that future research replicate the findings of this study in other contexts, preferably with field data.

In this study, participants' perceptions regarding co-production of service recovery (i.e., attitude and satisfaction) were not verified. Therefore, it is suggested that future studies investigate issues such as attitude and customer satisfaction with the co-production of service recovery after failure of integrity and competence.

References

- Averill, J. R. (1983). Studies on Anger and Aggression Implications for Theories of Emotion. *American Psychologist*, 38(11), 1145–1160.
- Basso, K., & Pizzutti, C. (2016). Trust Recovery Following a Double Deviation. *Journal of Service Research*, 19(2), 209–223.
- Berry, L. L., & Parasuraman, A. (1992). Prescriptions for a service quality revolution in America. *Organizational Dynamics*, 20(4), 5-15.
- Bonifield, C., & Cole, C. (2007). Affective to service failure: Anger, regret, and retaliatory versus conciliatory responses. *Marketing Letters*, 18(1), 85–99.
- Boshoff, C. (1997). An experimental study of service recovery options. *International Journal of service industry management*, 8(2), 110-130.
- Butler, J. K., Jr., & Cantrell, R. S. (1984). A behavioral decision theory approach to modeling dyadic trust in superiors and subordinates. *Psychological Reports*, 55, 19–28.
- Chan, K. W., Yim, C. K., & Lam, S. S. (2010). Is customer participation in value creation a double-edged sword? Evidence from professional financial services across cultures. *Journal of marketing*, 74(3), 48-64.
- Davidow, M. (2000). The bottom line impact of organizational responses to customer complaints. *Journal of hospitality & tourism research*, 24(4), 473-490.
- Dietz, G., & Den Hartog, D. N. (2006). Measuring trust inside organisations. *Personnel review*, 35(5), 557-588.

- Dong, B., Evans, K. R., & Zou, S. (2008). The effects of customer participation in co-created service recovery. *Journal of the academy of marketing science*, 36(1), 123-137.
- Dong, B., Sivakumar, K., Evans, K. R., & Zou, S. (2016). Recovering coproduced service failures: antecedents, consequences, and moderators of locus of recovery. *Journal of Service Research*, 19(3), 291-306.
- Fullerton, R. A., & Punj, G. (1993). Choosing to misbehave: A structural model of aberrant consumer behavior. *ACR North American Advances*.
- Grönroos, C. (1995). Relationship marketing: the strategy continuum. *Journal of the Academy of Marketing Science*, 23(4), 252-254.
- Hair, J. F., Jr., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2009). *Análise multivariada de dados* (6a ed.). Porto Alegre: Bookman.
- Hart, C. W., Heskett, J. L., & Sasser, J. W. (1990). The profitable art of service recovery. *Harvard business review*, 68(4), 148-156.
- Hazée, S., Van Vaerenbergh, Y., & Armirotto, V. (2017). Co-creating service recovery after service failure: The role of brand equity. *Journal of Business Research*, 74, 101-109.
- Heidenreich, S., Wittkowski, K., Handrich, M., & Falk, T. (2015). The dark side of customer co-creation: exploring the consequences of failed co-created services. *Journal of the Academy of Marketing Science*, 43(3), 279-296.
- Hess, R. L. Jr., Ganesan, S. & Klein, N. M. (2003). Service failure and recovery: The impact of relationship factors on customer satisfaction. *Journal of the Academy of Marketing Science*, 31(2), 127-145.
- Holloway, B. B. & Beatty, S. E. (2003). Service recovery in online retailing: A recovery opportunity. *Journal of Service Research*, 6(1), 92-105.
- Johnston, T. C., & Hewa, M. A. (1997). Fixing service failures. *Industrial marketing management*, 26(5), 467-473.
- Joireman, J., Grégoire, Y., Devezer, B., & Tripp, T. M. (2013). When do customers offer firms a “second chance” following a double deviation? The impact of inferred firm motives on customer revenge and reconciliation. *Journal of Retailing*, 89(3), 315–337.
- Kalamas, M., Laroche, M., & Makdessian, L. (2008). Reaching the boiling point: Consumers’ negative affective reactions to firm-attributed service failures. *Journal of Business Research*, 61(8), 813–824.
- Kim, P.H., Cooper, C. D., Dirks, K. T., & Ferrin, D. L. (2013). Repairing trust with individuals vs. Groups. *Organizational Behavior and Human Decision Processes*, 120(1), 1-14.
- Kim, P.H., Ferrin, D. L., Cooper, C.D. & Dirks, K. T. (2004). Removing the Shadow of Suspicion: The Effects of Apology Versus Denial for Repairing Competence- Versus Integrity-Based Trust Violations. *Journal of Applied Psychology*, 89(1), 104-118.
- Leach, C. W., Ellemers, N., & Barreto, M. (2007). Group Virtue: The Importance of Morality (vs. Competence and Sociability) in the Positive Evaluations of In-Groups. *Journal of Personality and Social Psychology*, 93(2), 234–49.
- Levesque, T. J., & McDougall, G. H. (2000). Service problems and recovery strategies: an experiment. *Canadian Journal of Administrative Sciences/Revue Canadienne des Sciences de l'Administration*, 17(1), 20-37.

- Maxham, J. G., & Netemeyer, R. G. (2002). A longitudinal study of complaining customers' evaluations of multiple service failures and recovery efforts. *Journal of marketing*, 66(4), 57-71.
- Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of applied psychology*, 84(1), 123.
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20, 709-734.
- Mustak, M., Jaakkola, E., Halinen, A., & Kaartemo, V. (2016). Customer participation management: developing a comprehensive framework and a research agenda. *Journal of Service Management*, 27(3), 250-275.
- Roggeveen, A. L., Tsiros, M., & Grewal, D. (2012). Understanding the co-creation effect: when does collaborating with customers provide a lift to service recovery?. *Journal of the Academy of Marketing Science*, 40(6), 771-790.
- Pallant, J. (2007). *Survival manual: A step by step guide to data analysis using SPSS for Windows*. (3a ed). New York, McGraw Hill.
- Roseman, I. J. (1991). Appraisal determinants of discrete emotions. *Cognition & Emotion*, 5(3), 161-200.
- Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of marketing research*, 356-372.
- Vázquez-Casielles, R., Iglesias, V., & Varela-Neira, C. (2017). Co-creation and service recovery process communication: effects on satisfaction, repurchase intentions, and word of mouth. *Service Business*, 11(2), 321-343.
- Weiner, B. (2000). Attributional thoughts about consumer behavior. *Journal of Consumer research*, 27(3), 382-387.
- Wojciszke, B., Bazinska, R., & Jaworski, M. (1998). On the Dominance of Moral Categories in Impression Formation. *Personality and Social Psychology Bulletin*, 24 (12), 1251-1263.
- Xu, Y., Marshall, R., Edvardsson, B., & Tronvoll, B. (2014). Show you care: initiating co-creation in service recovery. *Journal of service management*, 25(3), 369-387.
- Yi, S., & Baumgartner, H. (2004). Coping with negative emotions in purchase-related situations. *Journal of Consumer Psychology*, 14(3), 303-317.
- Zemke, R., & Bell, C. (1990) Service Recovery: doing it right the second time. *Training*. 42-80.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46.

Apêndice 1 – Scale and measures

Variable	Item [1-totally disagree; 7-totally agree]	Author
Return intentions	In the future I intend to stay in this hotel again. I will consider this hotel as my first choice when using this service again in the future. I will use this hotel on my next trip.	Zeithaml, Berry e Parasuraman (1996).
Positive word-of-mouth intentions	I would speak well of this hotel to other people. I would recommend this hotel to my friends and family.	Maxham e Netemeyer (2002).
Anger	I am feeling angry. I am feeling furious.	Yi e Baumgartner (2004).
Realism checks	The situation described in the text is realistic.	
Manipulation check (Type of failure)	Based on the reviews you read on the claims website, you believe that the failure occurred because of: a) Lack of organization and incompetence of the hotel to make reservations; b) Lack of ethics for prioritizing the allocation of other customers who paid a higher value for the room.	
Manipulation check (co-production)	The hotel offered me several options to solve the problem. I participated actively in solving the problem. I was very involved in deciding how the problem would be solved.	Heidenreich, Wittkowski, Handrich e Falk (2015) e Chan, Yim e Lam (2010).