

The Effects of Co-Production on Repurchase and Positive Word-of-Mouth after Dissatisfaction

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ABSTRACT

The customer-firm interaction has been pointed as a source of value creation (PRAHALAD; RAMASWAMY, 2004, VARGO; LUSCH, 2008), customer economic value attainment (CHAN *et al.*, 2010) and competitive effectiveness (BENDAPUDI; LEONE, 2003), making co-production an effective marketing tool from the managerial standpoint. From the consumers' standpoint, co-production is also of interest, because it allows them to take part in the production process of a product or service (ETGAR, 2008). The increasing importance of co-production in marketing literature is illustrated by the growing number of empirical research on the theme (e.g., BENDAPUDI; LEONE, 2003, ORDANINI; PAISNI, 2008, CHAN *et al.*, 2010). Given the positive effects of co-production such as increasing in customer's satisfaction (HUNT *et al.*, 2010) and control (ERTIMUR, 2008), the use of co-production as a managerial tool capable of enhancing positive responses even after a dissatisfying purchase episode is worthy of discussion. Based on Averill's (1973) typology of control, co-production is considered here a way to provide behavioral control to consumers on the production process, while information and refund choice are considered to provide cognitive and decisional control respectively. The relationships between those three variables and behavioral intentions, that are, repurchase and positive word-of-mouth intentions, are investigated in this paper, as co-production, information, and refund choice are predicted to impact positively on positive behavioral intentions after a consumer's dissatisfaction with the purchase. Two experimental studies were conducted to examine the above mentioned relationships, 97 Brazilian students participated in the first study and 90 French students in the second one. The first study manipulated co-production and information in a service context (a vacation travel offer), while the second study has manipulated co-production and refund choice in a product context (a writing desk offer). Results from the experimental studies supported most of the research hypotheses, indicating that co-production, information, and refund choice lead to higher repurchase and positive word-of-mouth intentions after a dissatisfying purchase, and that combining co-production with high information level leads to higher behavioral intentions than providing each one of them separately. Therefore, it seems that providing relevant information in situations where consumers co-produce makes them feel more able to do it, and, consequently, more satisfied with the process. From our findings, co-production, information and refund choice were proved to be important management tools which can improve repurchase and positive word-of-mouth intentions' ratings after dissatisfaction. The implications of results, research limitations, and suggestions for future research are presented at the end of the paper.

INTRODUCTION

The importance ascribed to consumer's participation has increased in recent years as marketing orientation has changed from a 'marketing to' to a 'marketing with' philosophy (LUSCH *et al.*, 2007), meaning that consumers are now co-creating value with the firm (VARGO; LUSCH, 2004). The interaction between customer and firm has been pointed as a source of value creation (PRAHALAD; RAMASWAMY, 2004, VARGO; LUSCH, 2008), customer economic value attainment (CHAN *et al.*, 2010) and competitive effectiveness (BENDAPUDI; LEONE, 2003), making co-production an effective marketing tool from the managerial standpoint. From the consumers' standpoint, co-production is also of interest, allowing them to take part in the production process of a product or service (ETGAR, 2008).

At this point a relevant question can be made: "Could co-production bring some advantage to the company even when the purchase outcome for the consumer is negative?" One could argue that when a consumer participates in the production process s/he perceives to have more control and also more responsibility over the outcomes (ERTIMUR, 2008; BENDAPUDI; LEONE, 2003). That will be particularly important from a company's perspective when the outcome is worse than expected by the consumer, so the company may have someone – the consumer who helped to produce the product or service- with whom "share" the responsibility for the negative result. Research involving attributional approach revealed that consumers perceive to be less deserving of refunds and apologies when they attribute the cause for product failure to themselves (FOLKES, 1984). Extending this reasoning to a co-production situation, co-productive consumers may share with the company the blame (the responsibility) for the negative outcome, and, consequently, may display higher positive behavioral intentions towards it, such as, positive word-of-mouth and repurchase intentions, after dissatisfying purchase episodes (also called in this paper "negative outcomes").

This article represents an initial effort to investigate the relationship between co-production and behavioral intentions after dissatisfaction with the purchase. Based on Averill's (1973) typology of behavioral, cognitive, and decisional control, co-production is here considered a drive for behavioral control, while information and refund choice are considered drivers for cognitive and decisional control, respectively. The effects of co-production, information and refund choice on repurchase and positive word-of-mouth intentions of consumers who get negative outcomes from their purchases are then analyzed through two experiments.

THEORETICAL BACKGROUND

Co-Production, Information, and Refund Choice

Co-production has been defined as consumer participation in production activities, such as product designing, resource aggregating or other processing activities leading to an output (product or service) that will be used or consumed (ETGAR, 2008). Co-production differs from customization as it allows consumers to really take part in the creation, execution and delivery of a product or service, while customization implies gathering information about consumers' preferences to offer them a suitable product (ERTIMUR, 2008) or even to give them a choice menu of items they can choose from to get an appropriate product to their needs (LIECHTY *et al.*, 2001). Due to this difference between co-production and customization, the former may be argued to provide higher levels of control (ERTIMUR, 2008).

Striving to understand how people evaluate and choose services between more participative ones (e.g., pump your own gas in a service station) – which includes co-

production – and less participative ones (e.g., have an attendant to pump the gas for you), Bateson and Langeard (1982) found that control was the dimension that stood out in importance. Consumers who chose the more participative scenario perceived control as important while people from the less participative group reported risk as an important dimension. Consumers who chose more participative services also perceived less control in the traditional and less participative services. Thus, an inference can be made about how important control is for those who are willing to co-produce.

Averill's (1973) widely mentioned typology of control (e.g., HUI; TOFFOLI, 2002; VAN ROMPAY *et al.*, 2008) distinguishes behavioral control, cognitive control, and decisional control as three types of control. Behavioral control involves a direct influence or action on environment, cognitive control refers to a subject's interpretation and appraisal of an event while decisional control represents the opportunity to choose among different courses of action. Co-production is considered here a way to provide behavioral control to consumers in the production process.

Besides the above mentioned association with control, there is another key aspect involving co-production: customers seem to take more responsibility over an outcome when they participate as co-producers (BENDAPUDI; LEONE, 2003), fact that may reduce the responsibility attributed to the firm. Folkes (1984) found that the locus of the cause for a failure influences market equity reactions, because when a failure is firm-related, consumers perceived to deserve a refund and an apology, but when the failure is consumer-related, a consumer deserves neither a refund nor an apology. So when the consumer is the responsible for the product failure, s/he does not expect the firm to do something to redress it. Due to the increase of control and responsibility, consumers who co-produce may share the blame over a negative outcome with the firm, or even attribute the blame entirely to themselves, consequently minimizing possible negative reactions towards the company and having more positive behavior intentions such as repurchase intent and word-of-mouth, compared to those consumers who do not co-produce. Moreover, in a co-production context, the process satisfaction – satisfaction with the process that leads to the final product or service – may be also greater, since the consumer can influence the purchase's outcome, and with stronger process satisfaction, the positive behavioral intentions after a purchase may be greater, regardless whether the outcome is positive or negative. The positive effect of co-production on satisfaction was already proposed by Ertimur (2008) and empirically verified by Hunt *et al.* (2010). Based on this reasoning, we propose that:

H1a: After a negative outcome, consumers who co-produce will exhibit higher repurchase intention, compared to those consumers who do not co-produce.

H1b: After a negative outcome, consumers who co-produce will exhibit higher positive word-of-mouth intention, compared to those consumers who do not co-produce.

As marketing has developed from a “market to” philosophy to a “market with” philosophy where the customer collaborates with the firm in the value creation process (LUSCH *et al.*, 2007), it is important for the customer to have access to information s/he can use in order to co-create value. Dholakia *et al.* (2010) claim that information dominates value creation and its manipulation is converted into exchangeable value.

Information gain is one kind of cognitive control in Averill's (1973) typology. Information leads to predictability and the ability to predict the consequences of an event, in turn, may induce feelings of control (STAUB *et al.*, 1971), in a way that foreknowledge is an important determinant of perceived control (WORTMAN, 1975). The effect of predictability on perceived control has been emphasized in consumer research by Holt (1995) who showed

through an analysis of extensive observations of baseball spectators that their feeling of being able to predict action on the field enhanced the perception that they were involved in the game's production and so how they interjected some control over it. In the context of service encounters, predictability can offer cognitive control to customers and service providers even though they have little direct control over the situation (BATESON, 1985). Thompson (1981) presents a typology for control slightly different from Averill's (1973) typology, where information is considered, by itself, one type of control. The author also argues that information may engender feelings of control.

If control is higher with high information instead of low information, in cases of dissatisfying outcomes, consumers who had more information during the purchase will exhibit higher positive behavioral intentions once they may feel more in control of it. Another reason for this is that when the consumer has more information on a purchase situation, that should increase her/his process satisfaction, which, in turn enhances behavioral intentions, regardless the valence of the outcomes. Considering the preceding discussion and looking upon information as a value creation dimension (DHOLAKIA *et al.*, 2010), the next hypotheses are formulated:

H2a: After a negative outcome, consumers who receive more information will exhibit higher repurchase intention, compared to those consumers who receive less information.

H2b: After a negative outcome, consumers who receive more information will exhibit higher positive word-of-mouth intentions, compared to those consumers who receive less information.

According to Katz and Assor (2006), choice appears in several motivational frameworks even though research findings concerning the benefits and drawbacks of choice points out to both positive and negative outcomes. This paper does not address the negative outcomes of choice that come with choice overload (a meta-analytic review can be seen at Scheibehenne *et al.*, 2010). Rather, this paper focuses on the benefits choice can bring, such as, the increase of perceived control (HUI; BATESON, 1991) and satisfaction (BOTTI; MCGILL, 2006). Choice is something desirable for consumers when considering that choice restrictions may generate emotional responses such as anger, resentment, and depression, as well as behavioral responses which may flow from compliance and adaptation to rejection and rebellion (BOTTI *et al.*, 2008).

Averill's (1973) conceptualization clearly identifies decisional control as choice, or more precisely as the individual's opportunity to choose. Such a direct link between choice and control finds support in deCharms' (1968) theory of personal causation, which posits that individuals who perceive their behavior as stemming from their own choices will perceive more control and in turn will be more highly task motivated than individuals who see their behavior as stemming from external force. This assumption that consumer choice may result in more consumer's perceived control has empirically been supported (HUI; BATESON, 1991; MILLS; KRANTZ, 1979). Langer (1975) found similar results dealing with illusion of control instead of perceived control. Giving an individual the opportunity to choose made him feel greater control even though he participated in a pure chance task. So giving consumers a choice like keeping the product or returning it and asking for a refund may also soften negative reactions after a dissatisfying purchase due to the increase of decisional control. If consumers perceive to have this choice, the process satisfaction is probably higher, fact that also contributes to higher behavioral intentions. Based on this, the following hypotheses are proposed:

H3a: After a negative outcome, consumers who have refund choice will exhibit higher repurchase intention, compared to those consumers who do not have refund choice.

H3b: After a negative outcome, consumers who have refund choice will exhibit higher positive word-of-mouth intentions, compared to those consumers who do not have refund choice.

Once the linkages between behavioral intentions and co-production, information, and choice were drawn, the effects of matching these three independent variables are worthy of investigation, examining a potential additive causal relationship. Additive causal relationship exists when the causal effects of two variables (e.g. co-production and information) on a third one (e.g. repurchase intention) are added (KUMAR *et al.*, 1999). Co-production, information and refund choice are all manageable by firms and can be provided according to the firms' purposes and convenience. Having three managerial tools at hand, it is desirable to know whether combining them at the same time will reflect on more beneficial results than providing them individually. It is logical to assume that once a consumer has the chance to co-produce a service or product, he or she will perceive to have more control over the situation and show more process satisfaction if a high level of information is available, once information brings predictability (BATESON, 1985) and also makes the consumer feel more able to perform the task required by co-production. Consequently, this consumer will demonstrate more positive behavioral intentions after a dissatisfying outcome. So the following hypotheses are formulated:

H4a: After a negative outcome, consumers who co-produce *and* receive more information will exhibit greater repurchase intention when compared to those consumers who either co-produce or receive more information.

H4b: After a negative outcome, consumers who co-produce *and* receive more information will exhibit higher positive word-of-mouth when compared to those consumers who either co-produce or receive more information.

Extending the same logic to the combination between co-production and refund choice, it is possible to consider that consumers who co-produce will feel better and perceive more control if they know it will be possible to return the product and ask for a refund in case of dissatisfaction with the product they helped to create. This may also enhance their process satisfaction in a way that these consumers will not feel so bad with a dissatisfying product and may have more positive behavioral intentions compared to consumers who could only co-produce or ask for a refund. This leads to the last group of hypotheses:

H5a: After a negative outcome, consumers who co-produce *and* have refund choice will exhibit higher repurchase intention when compared to those consumers who either co-produce or have refund choice.

H5b: After a negative outcome, consumers who co-produce *and* have refund choice will exhibit higher positive word-of-mouth intention when compared to those consumers who either co-produce or have refund choice.

Heretofore, theoretical foundation to the five hypotheses has been presented. The remainder of this work is organized as follows: the first experiment manipulates co-production and information in a service context to examine their effects on repurchase and positive word-of-mouth intentions after a negative outcome. The second experiment maintains the same objectives of the first one, manipulating co-production and refund choice in a product purchase.

STUDY 1

Method

A 2 (co-production: co-production and examine their effects on) x 2 (information level: low and high) design was employed on the first study. Subjects were undergraduate students from a Brazilian university ($n = 97$) who voluntarily participated. Participants were randomly assigned to one of the scenarios. Both co-production and information were manipulated using descriptive scenarios simulating the purchase of a vacation travel.

Participants received a questionnaire with the following narrative: “After a tough semester at university, you decided to travel for vacation and you go to a travel agency to look at the possibilities.” The narrative sequence then varied to manipulate co-production and information. Participants who were assigned to a co-production scenario read that the following text: “When you arrive at the agency, the agent explains you can design your own trip itinerary, so your travel will have the exactly features you want.” Participants in the no co-production condition were provided the text: “When you arrive at the agency, the agent explains he can offer you three package options and that it is not possible to do a different package.” Low information scenarios presented the text: “The agent gives you price information. No other information is offered to you.” and high information scenarios provided the text: “The agent gives you a booklet where you find information about each city of this country’s region, such as touristic points, cultural events and celebrations. You also receive information about hotels, hostels and restaurants. The agent gives you price information.” After co-production and information manipulations, all participants received the following text about the travel outcome: “Imagine you took the trip and it was a negative experience because of the choices you made with the travel agency.”

Participants were then presented with a questionnaire which had one question to check co-production manipulation (“I helped design the trip I bought”) and two to check information manipulation (“Regarding the amount of information given by the travel agency, I consider it was: insufficient/sufficient; low information level/high information level”). The questionnaire also had statements rated on seven-point Likert scales (1 = very unlikely, 7 = very likely) to measure behavioral intentions. Repurchase intent was measured using a three items scale ($\alpha = .95$) adapted from Zeithaml et al. (1996): “How likely are you to make purchases in this store again?”, “How likely are you to do more business with this store in the future?”, and “How likely are you to consider this store as your first choice to buy that kind of product?” Word-of-mouth was assessed using a three items scale ($\alpha = .96$) also adapted from Zeithaml *et al.* (1996): “How likely are you to recommend this store to friends, neighbors and relatives?”, “How likely are you to say positive things about this store to other people?”, and “How likely are you to encourage your friends and family to make business with this store?” The scales were factor analyzed and exhibit reliability, and discriminant and convergent validity (FORNELL; LARCKER, 1981).

Results and Discussion

Both manipulations were effective ($p < .001$): Participants’ estimates of co-production were higher in co-production than in no co-production scenarios ($M_{\text{copr}} = 5.72$ vs. $M_{\text{nocopr}} = 3.00$; $F(1, 93) = 59.37$) and their perceptions of information level were greater in the high information than in the low information condition ($M_{\text{high}} = 5.45$ vs. $M_{\text{low}} = 2.50$; $F(1, 93) = 85.55$).

ANOVA revealed a significant main effect of co-production on repurchase ($F(1, 93) = 4.12$, $p < .05$) and positive word-of-mouth intentions ($F(1, 93) = 4.64$, $p < .05$). In co-

production scenarios, both word-of-mouth ($M_{wom} = 1.98$) and repurchase intention ($M_{rep} = 2.02$) were greater than in no co-production scenarios ($M_{wom} = 1.48$; $M_{rep} = 1.55$), supporting H1a and H1b.

Information level did not have significant main effect on neither of the behavioral intentions ($p > .05$), so H2a and H2b could not be supported. The additive effects of co-production and information on repurchase ($F(1, 93) = 5.13, p < .05$) and word-of-mouth intentions ($F(1, 93) = 4.70, p < .05$), however, were significant. Therefore, these intentions were higher when both co-production and high information level were available ($M_{rep} = 2.41$; $M_{wom} = 2.43$) than when co-production ($M_{rep} = 1.63$; $M_{wom} = 1.53$) or information ($M_{rep} = 1.42$; $M_{wom} = 1.43$) were presented, separately. These results support H4a and H4b, offering evidence for the beneficence of combining co-production and information on a service provision situation (see figures 1 and 2).

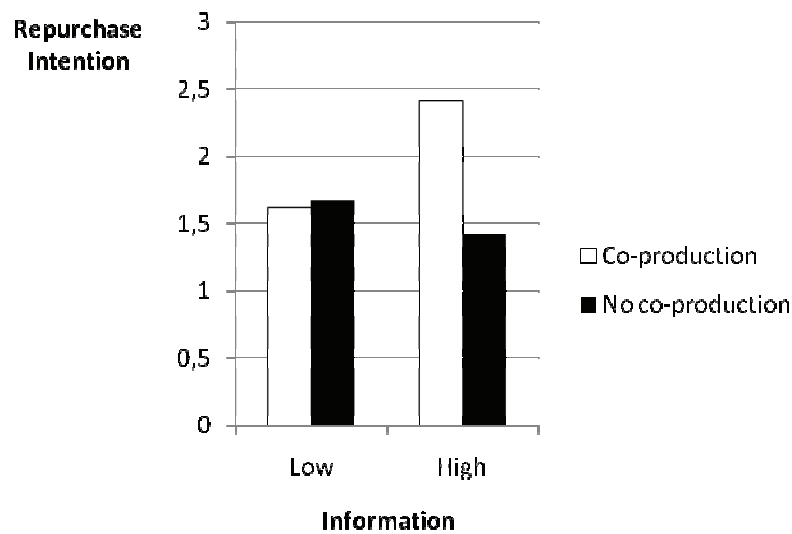


Figure 1: Repurchase Intention as a Function of Co-production and Information

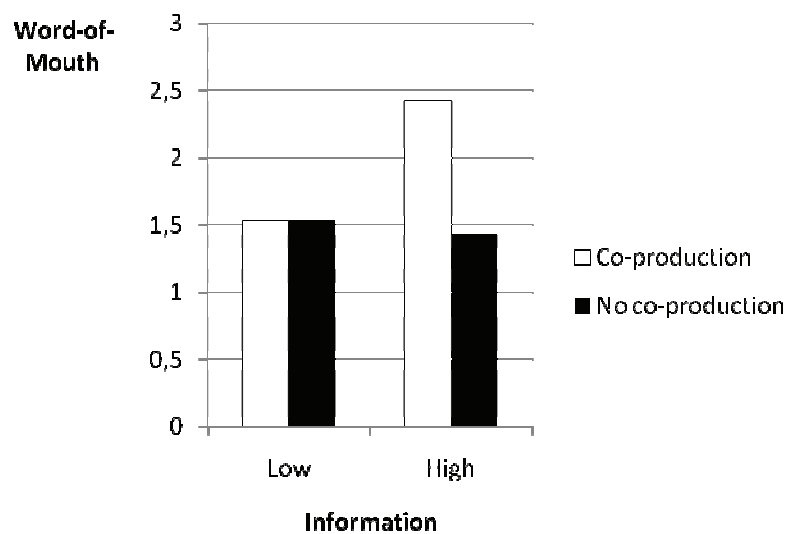


Figure 2: Word-of-Mouth as a Function of Co-production and Information

The results above mentioned show that participants' repurchase and positive word-of-mouth intentions were relatively low in co-production and in co-production with high information level scenarios, and this is not surprising, since those behavioral intentions were measured after a dissatisfying purchase. The relevant finding is that the presence of co-production and information generates higher behavioral intentions compared to scenarios where these independent variables are absent.

Results of study 1 show that even when consumers face a negative experience, co-production enhances consumers' repurchase intention and positive word-of-mouth and that providing consumers with high information level increases those behavioral intentions even more. Offering just higher information level did not have any positive impact on behavioral intentions when compared to a low information condition, so the predictability that stems from information was not sufficient to minimize the negative effects of a dissatisfying experience on this situation. Study 2 extends the investigation of the first study to the context of co-production of a product (instead of service), also based on the prediction that co-production will lead to a higher level of repurchase intention and word-of-mouth after a negative outcome and predicting refund choice to lead to higher behavioral intentions as well.

STUDY 2

Method

Participants in this 2 (co-production: co-production and no co-production) x 2 (refund choice: choice of refund and no choice of refund) between-subjects design were 90 undergraduate students from a French university. Descriptive scenarios were adopted once again, this time to manipulate co-production and refund choice in a desk purchase simulation.

Participants received the following narrative: "You have bought a computer to perform your personal and professional activities and now you need a desk where you can keep it on. You go to a store to look at some desks that are on display there." Participants who were randomly assigned to a co-production scenario could subsequently read the text: "You ask the salesperson if you could design your own desk. The salesperson says that it is possible and calls an employee that promptly starts to draw your writing desk following your instructions. This way, your desk will have the features (height, width, divisions, accessories, etc.) you want." Participants assigned to a no co-production scenario received a different text: "You ask the salesperson if you could design your own desk. The salesperson says that it is not possible, because the factory could produce only desks identical to those on display at the store. So you keep looking at the models in the store." With the purpose of manipulating refund choice, two diverse texts were given to participants, one narrative that contained the refund choice: "The salesperson informs you that the store has a guarantee satisfaction policy, which offers full refund in case of returning the product", and another one that did not contain it: "The salesperson informs you that the store does not have a guarantee satisfaction policy, which means you will not get a refund in case of returning the product." All students, independently from the scenario assigned, were told that they made the purchase and then received the narrative: "Imagine that you did not like the desk you have just bought."

Co-production's manipulation was checked through one question ("I helped to design the desk I bought") and so it was with refund choice's manipulation ("The store offers me the possibility to get a refund in case I am not satisfied"). The same scales from study 1 were used to assess respondent's repurchase intent ($\alpha = .88$) and word-of-mouth ($\alpha = .95$).

Results and Discussion

Participants' estimates of co-production were higher in co-production scenarios ($M_{\text{copr}} = 5.98$) than in no co-production scenarios ($M_{\text{nocopr}} = 1.41$; $F(1, 86) = 455.12, p < .001$), indicating that co-production manipulation was effective. Likewise, participants' perception of choice were greater in the refund choice than in the no-choice condition ($M_{\text{choice}} = 6.09$ vs. $M_{\text{nochoice}} = 1.98$; $F(1, 86) = 151.21, p < .001$).

Results for co-production in study 2 were similar to study 1: ANOVA revealed a significant main effect of co-production on repurchase intention ($F(1, 86) = 12.79, p < .005$) and word-of-mouth ($F(1, 86) = 10.29, p < .005$). As predicted, repurchase intention and word-of-mouth were greater on co-production scenarios ($M_{\text{rep}} = 2.54, M_{\text{wom}} = 2.70$) when compared to no co-production scenarios ($M_{\text{rep}} = 1.84, M_{\text{wom}} = 1.93$). These results support hypotheses H1a and H1b.

Refund choice also had significant main effect on repurchase intention ($F(1, 86) = 9.25, p < .005$) and word-of-mouth ($F(1, 86) = 7.98, p < .05$), the scenarios with refund choice having greater behavioral intentions ($M_{\text{rep}} = 2.49, M_{\text{wom}} = 2.64$) than the no choice scenarios ($M_{\text{rep}} = 1.90, M_{\text{wom}} = 1.98$). These results support H3a and H3b. Nevertheless, there was no significant additive effect of co-production and refund choice on repurchase ($F(1, 86) = 0.22, \text{NS}$) or word-of-mouth intentions ($F(1, 86) = 0.28, \text{NS}$), offering no support for H5a and H5b. Similarly to study 1, behavioral intentions were relatively low in the presence of the independent variables, but they were higher than in scenarios where co-production and refund choice were absent.

Study 2 reasserts findings from study 1 for co-production, showing that it can minimize effects of a dissatisfying outcome over behavioral intentions. Study 2 results also show that giving a refund choice in a product purchase also enhance behavioral intentions after a negative outcome, but offering co-production and refund choice together did not make any difference, frustrating the idea that co-production and refund choice would had greater effect than each one of them individually.

Finally, participants' perception of scenarios realism was assessed through a seven-point Likert scale. The scenarios were considered realistic and possible to happen with them ($M_{\text{realism}} = 4.60; M_{\text{realism}} = 4.48$, for study 1 and 2 respectively).

GENERAL DISCUSSION

This paper investigates the effects of co-production, information and refund choice on purchase and positive word-of-mouth among consumers after a dissatisfying episode. Findings of studies 1 and 2 strongly support that co-production enhances consumers' positive behavioral intentions towards the company after a negative outcome, softening its potential harmful effects.

Co-production, information and refund are tools that firms may manage in order to capture and retain clients. The main contribution of this article is to investigate ways of how firms may arrange its production process, regardless a product or service context, to reduce negative effects on behavioral intentions after dissatisfaction.

The refutation of hypotheses H2a and H2b suggests that information alone does not have effects over behavioral intentions after a dissatisfying outcome, but the confirmation of hypotheses H5a and H5b indicates that co-production with high level of information brings better results on those intentions than co-production with low level of information. That is because a consumer may not feel comfortable in participating of the production process if he or she does not have the necessary information to do it right. Providing relevant information

in situations where the firm offers consumers co-production is highly desirable, because it may let individuals feel more able to do it, more in control of the situation and more satisfied with the process. Since both information (AVERILL, 1973) and co-production (ERTIMUR, 2008) mean to have more control, their combination may lead to more positive effects for individuals exhibiting a high desire for control. Future research could investigate this moderating role of desire for control. An inference that can also be made by looking at the confirmation of hypotheses H5a and H5b is that firms should try to engage consumers in simple tasks when offering them the possibility to co-produce, so the information offered to consumer does not have to be too complex. Complex information could be harmful if consumers do not understand it, insofar as they could believe that co-production is not worthy in such demanding information processing, or even worse, they could think they are not able to perform such tasks.

The refutation of hypotheses H6a and H6b (referred to the co-production and refund choice additive effect) and the confirmation of hypotheses H3a and H3b (referred to the direct effect of refund choice on behavioral intentions), on the other hand, show that refund choice can positively influence behavioral intentions after a negative outcome, but offering co-production and refund choice jointly did not turn any better those intentions than offering them individually. Consumers tend to behave in a more positive way when they have a refund choice than when no choice is given, because this choice would lead to greater control and process satisfaction. But why did not refund choice enhance even more behavior intentions when offered together with co-production? Maybe because it does not make the consumer feel more capable of performing the task required by co-production. Nevertheless, these aspects can be further analyzed in future research.

It can be also object of future research the relationship between co-production and other already cited constructs such as satisfaction, self-efficacy and desire for control.

Self-efficacy is an individual's judgment of his/her own capability to perform a certain action in order to achieve a desired outcome (BANDURA, 1982; 2006). This judgment influences consumers' behavioral response (MCKEE *et al.*, 2007) and may have a moderating effect when it comes to co-production, as it requires customer participation. The extent to which consumers feel able to perform a co-production's activity may influence their behavioral intentions in such manner that consumers high in self-efficacy who co-produce may have greater repurchase and word-of-mouth intentions than consumers low in self-efficacy who also co-produce. Consumers low in self-efficacy may prefer situations where the purchase outcome is not influenced by their actions.

Likewise, desire for control may also moderate the relationship between co-production and repurchase intentions. Desire for control refers to an individual's motivation to control life's events (BURGER; COOPER, 1979) and thus it may affect individual's willingness to control a purchase's outcome by co-producing it. Consumers high in desire for control who co-produce may have greater repurchase and word-of-mouth intentions compared to those consumers who also co-produce but have low scores for desire for control.

Our findings show important effects of co-production (and information and refund possibility) on positive behavioral intentions after dissatisfying purchase. Nevertheless, the mechanisms behind these effects are still unexplored. During the paper, we presented different paths through which these effects could happen. Particularly, future research should investigate three potential mediators of these relationships: perceived control, process satisfaction and causal attribution. That investigation would complete the "picture", the understanding of the whole phenomenon evolving these relationships. These mediating roles are addressed next.

As we have already pointed, co-production is an important dimension of control (BATESON; LANGEARD, 1982; ERTIMUR, 2008). The amount of control customers perceive while they co-produce may influence their inclination to make purchases in the same store again and recommend it to other people even after a negative outcome. Similarly, process satisfaction may also influence repurchase and word-of-mouth intentions when there is no outcome satisfaction. One could probably expect that the greater the perceived control and the process satisfaction are, the greater the behavioral intentions after a negative outcome are.

Co-production and behavioral intentions after dissatisfaction could also be moderated by causal attribution. There are three causal properties of phenomenal causality as it can be seen on Folkes (1984) and Weiner (2000): stability (if the cause is relatively permanent or temporary), locus (whether the cause is located in the consumer or in the seller), and controllability (whether the cause is controllable or not). If a co-productive consumer attributes the cause of the dissatisfying outcome to the firm and also thinks it is permanent (e.g. the firm does not have the necessary resources to enable the co-production process), this consumer probably will exhibit lower repurchase and positive word-of-mouth intentions after a negative result than a consumer who attributes the cause to his or herself as a temporary one (e.g. s/he was not paying enough attention to the task, but it will not happen again).

The paper has achieved its proposition: to investigate whether co-production, information and refund choice could lead to higher repurchase and positive word-of-mouth intentions after a negative outcome. The two experimental studies conducted showed that they can lead to higher behavioral intentions, though information only had significant effects when combined with co-production. New studies can go beyond the limitations of this paper by investigating how the variables that have just been mentioned may influence this relationship, establishing a complete framework about the theme which encompasses the way how co-production affects behavioral intentions.

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