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Redesigning loyalty marketing for a better world:

The impact of green loyalty programs on perceived value

Purpose – Given the controversial nature of the effectiveness of loyalty programs (LPs), this paper examines the effect of a new type of LP, namely green LPs, on consumers' perceived value of LPs. Specifically, we identify three types of green LP design and test their impact on perceived value.

Design/methodology/approach – An experimental protocol involving 1,016 shoppers was adopted in order to analyze the three types of green LPs identified in the literature.

Findings – Supported by Social Exchange Theory, our results show that a green LP can influence the perceived value of LPs. Such programs can drive psychological value in addition to the economic value linked only to monetary incentives. LPs rewarding sustainable behavior appear to be the most significant generators of value.

Originality/value – Since Corporate Social Responsibility (CSR) is now critical to a company's success, this study investigates how firms can integrate it in order to improve the effectiveness of their LP design.

Keywords: loyalty program; green loyalty program; corporate social responsibility (CSR); perceived value; social exchange theory.

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Introduction

Many service providers offer loyalty programs (LPs) to effectively manage their customer relations. Among such service providers, considerable academic attention has been paid to retailers in service research, since retail is one of the most important economic activities in the services domain (Marín-García *et al.*, 2021). Retailers frequently adopt LPs as they are expected to increase repeat purchases thanks to a behavior reward scheme (Başgöze *et al*., 2021; Yi and Jeon, 2003). In order to make LPs a key aspect of the customer relationship management, retailers need to develop programs "*that resonate with customers at an emotional and attitudinal level in order to induce more than just financially induced repeat patronage*" (Eason *et al*., 2015, p.71).

To this end, an emerging trend is the implementation of pro-social LPs that embed the retailer's social and environmental responsibility in an LP design by focusing on societal or environmental causes (Kumar, 2019). This echoes the consumers' increasing concern for more sustainable consumption and firms' growing interest in protecting the environment (AFLAC 2020[1]). A green LP is a form of pro-social LP that "*rewards customers for green behaviors*" (Liu and Mattila, 2016, p.577). Since CSR is strategically important to companies (Chou *et al.*, 2021), potentially positioning them accordingly by highlighting their social and/or environmental values (Einwiller *et al.*, 2019), developing a green LP can be a promising way to heighten engagement as well as to attract and retain customers (Sen *et al.,* 2009).

There are three ways to design a green LP (Table I). The first option encourages green purchases through LP reward schemes (Hwang and Kandampully, 2015). For instance, Carrefour gives customers who buy organic products (*versus* non-organic products) double the number of loyalty points. A second way to incorporate prosocial issues into LPs is to reward customers not only for their purchases, but also for virtuous behaviors related to environmental protection: e.g., recycling, using a towel more than once, minimizing energy consumption, and soft mobility (Giebelhausen *et al.*, 2016; Nastasoiu and Vandenbosh 2019). This is the logic informing "recyclebanks": "*The more you do it, the more you'll earn*". Finally, a green LP can also be created by incorporating a social cause into the LP and

encouraging customers to donate their rewards to environmental protection causes. Tesco, for instance, has developed an "altruistic" LP of this kind, allowing customers to offer their own rewards to cause-related charities. Such examples show that green LPs can be implemented in various ways, leading to a broader range of green LP designs.

[Insert Table I here]

Despite their growing popularity in business practices, two main issues remain underexplored. Firstly, academic research on green LPs is scarce and largely focuses on one specific type of LP, ignoring how consumers perceive and respond to them in general. Secondly, academics note that reorienting LPs to focus on societal and environmental causes can revive consumer interest in such programs (e.g., Giebelhausen *et al.*, 2016; Hwang and Kandampully, 2015; Kumar, 2019), but it remains unclear whether green LPs can generate value for customers. Based on Social Exchange Theory (SET) (Emerson, 1976), the present research examines whether green LPs can be perceived as more valuable than conventional ones. A large body of research has indicated that LPs can only build loyalty through customer value perception (Kreis and Mafael, 2014; Mimouni-Chaabane and Volle, 2010). However, to our knowledge, the role of perceived value has not been explored with regard to green LPs. Hwang and Kandampully (2015) only highlighted the role of overall perceived value as a driver of consumers' participation in green LPs. Finally, studies to date have investigated the effect of green LPs on customer attitudes without examining the effect of the different typologies of the green LPs identified in the literature. This led us to formulate the two following research questions (RQ):

(RQ1) Do green LPs increase perceived value compared to conventional LPs?

(RQ2) Do green LPs differ in their role of eliciting perceived value?

The present study used an online experiment to address the above research questions by examining whether customers perceive value from green LPs. Underpinned by Social Exchange Theory (Emerson, 1976), this paper contributes to existing knowledge on the conceptualization and effectiveness of green LPs and related designs. Moreover, our research offers actionable insights for

retailers and service providers to help them develop LPs that can positively influence both sustainable behaviors and perceived value (Dodds *et al.,* 2022).

Literature review and conceptual framework

Perceived value of LPs: a key factor in LP efficacy

Loyalty programs (LPs) or loyalty reward programs (Başgöze *et al.*, 2021) aim to boost repeated purchase behavior together with attitudinal loyalty and commitment to the retailer (Shoemaker and Lewis, 1999). They encourage loyal customer patronage by offering value to reward repeat behaviors (Yi and Jeon, 2003). A "conventional LP" allows consumers to "*earn reward points based on their total spending at the store, and the accumulated points can be redeemed for merchandise credits to purchase any products*" (Zhang and Breugelmans, 2012, p. 51). However, LPs vary in terms of reward types and structure (Ho *et al.,* 2009). Empirical evidence regarding their impact on loyalty remains uncertain (Belli *et al*., 2022; Dorotic *et al.*, 2012): academics point out that LPs need to be perceived as valuable by consumers to have an impact on customer loyalty (O'Brien and Jones, 1995; Kreis and Mafael, 2014). According to Zeithaml (1988), customers' perceived value of an LP can be viewed as the trade-off between what the LP can offer them (perceived benefits) and the costs customers have to assume to get the rewards. As a result, the perceived value of LPs embodies "*the overall assessment of the utility of the LP to satisfy consumer's needs*" (Kreis and Mafael, 2014, p. 591). For consumers, costs and benefits are the most important factors in determining participation in an LP (De Wulf *et al*., 2003). More specifically, LPs can lead to psychological, economic, and interaction perceived value (Kreis and Mafael, 2014).

Perceived psychological value refers to perceptions of self-esteem (Mimouni-Chaabane and Volle, 2010), which stem from an emotionally attached recognition to member status (Xie and Chen, 2014). Indeed, LP membership enhances self-concept when the LP in question enables consumers to feel special. Xie and Chen (2014) demonstrate that the psychological value of LPs contributes to active loyalty in creating switching costs.

Economic value reflects financial advantages and the LP's capacity to save customers money (Kreis and Mafael, 2014; Mimouni-Chaabane and Volle, 2010). Most customers attach importance to

the economic benefits of LP membership as they are tangible and easy to evaluate (Mimouni-Chaabane and Volle, 2010). However, perceived economic value may be insufficient to drive loyalty.

Interaction value (Kreis and Mafael, 2014), also labelled social value (Mimouni-Chaabane and Volle, 2010), refers to the need to belong and to create social ties (Kreis and Mafael, 2014). In other words, this type of LP helps consumers to feel part of a community of like-minded customers or to have a closer relationship with the service provider by taking part in regular workshops on new product innovations, for example (Iglesias *et al.*, 2020). In most grocery retail LPs, however, the role of the community is limited or non-existent. We therefore not discuss this dimension further.

LP design

LPs' effects on customer loyalty are still strongly debated and LP design has an important role in this respect (Belli *et al.*, 2022). In general, LP designs involve rewards (Keh and Lee, 2006) and a schedule (Dowling and Uncles, 1997), the LP structure (Belli e*t al.*, 2022) and a points structure (Baker and Legendre, 2020). Among these factors, the reward component has been most widely investigated by scholars. Numerous classifications exist distinguishing the type of reward (soft or hard rewards, economic or social rewards, direct or indirect rewards), the timing of the rewards (immediate or delayed), and the beneficiary of the rewards (self-oriented or altruistic/other oriented) (Eason *et al.*, 2015; Hwang and Choi, 2020).

Another component of LP design is the "points structure". This refers to the rules concerning the accumulation of rewards (Baker and Legendre, 2020). In conventional LPs, the points structure is based on buying behavior: the more consumers buy in a retail store, the more they are rewarded. Consequently, we identify different point structures depending on the type of expenditure that leads to the collection of points (continuity programs *versus* target category programs where only specific categories or items enable points to be earned) (Breugelmans et al., 2015), or the amount of money or points needed to be eligible for the special rewards (customer-tier LPs *versus* frequency reward LPs). Recently, there has been growing interest in a new form of LP points structure by customers and companies alike, where members can be rewarded according to customers' existing goal alignment,

such as being physically active or taking part in more sustainable consumption practices (Hwang and Kandampully, 2015).

Designing green LPs

Many companies now include corporate social responsibility (CSR) in their marketing strategy. According to Mohr *et al.* (2001), CSR refers to "*a company's commitment to minimizing or eliminating any harmful effects and maximizing its long-run beneficial impact on society"* (p. 47). Leveraging the power of CSR is strategically important to businesses (Chou *et al.*, 2021) and the effort made to increase their CSR commitment and orientation can lead to positive outcomes: CSR activities boost financial performance, improve brand image (Luo and Bhattacharya, 2009), and enhance customer loyalty (Liu and Mattila, 2016; Louis *et al*., 2019) by creating a "CSR halo effect" (Peréz and Rodríguez-del-Bosque, 2015). In a different context to LPs, O'Brien *et al.* (2020) show that CSR initiatives favored by customers have a strong impact on their willingness to engage with future CSR initiatives (volunteering their time, effort, money), which in turn influences customer loyalty (O'Brien *et al*., 2015). To this end, incorporating CSR into LPs seems a promising way to achieve both economic and environmental goals.

Research into green LPs is still in its infancy, with the literature mainly focusing on three green LP design alternatives based on a rewards or a points structure: 1) LPs that reward green non-purchase behavior (Giebelhausen *et al.*, 2016); 2) LPs that reward green purchase behavior (Hwang and Kandampully, 2015); and 3) green altruistic LPs that allow customers to donate their loyalty points to a cause-related association (Eason *et al.*, 2015).

First, LPs that reward green non-purchase behavior encourage sustainable behaviors through the LP's points structure. In these LPs, sustainable behaviors, in other words, "*actions that result in decreases in adverse environmental impacts as well as decreased utilization of natural resources across the lifecycle of the product, behavior, or service"* (White *et al.*, 2019, p.24) are rewarded. Unlike conventional LPs rewarding purchase behavior, in this type of green LP, rewards are less linked to behavioral loyalty to the service provider. Giebelhausen *et al.* (2016) show that consumers who participate in this type of LP report higher satisfaction with the service encounter. This effect is driven

by a process involving the "warm glow", indicating that customers are motivated to adopt good behavior due to their emotional benefits.

Secondly, LPs that reward green purchase behavior encourage "*consumers' purchases of socially responsible products through reward scheme of the LP*" (Hwang and Kandampully, 2015, p. 344). In this case, the LP's green dimension is introduced through points awarded via a target category program. "Socially responsible products" are eco-friendly or organic products. In other words, the products are developed via environmentally friendly processes (Hwang and Kandampully, 2015). These eco-friendly or organic products are more expensive than conventional ones for consumers, which means that by rewarding the purchase of such products, the firm recognizes the consumer's effort. Hwang and Kandampully (2015) argue that positive attitude toward these green LPs is based on a feeling of gratitude.

Finally, green altruistic LPs allow members to donate their points to an environmental protection association. In contrast to a conventional LP where rewards are self-oriented, in a green altruistic LP, a third party, such as a charity, benefits from a person's patronage (Eason *et al.*, 2015). Table II summarizes existing research on green LPs and how the present study contributes to this literature.

[Insert Table II here]

Conceptual development

Our research aims to assess the effect of various green LP designs on their perceived value. Perceived value appears to be one of the main ways a company can generate customer loyalty. Many researchers argue that an LP's perceived value can determine the program's success (Evanschitzky *et al.*, 2012; Belli *et al.*, 2022). Social Exchange Theory has been applied as the main theoretical background in our study to explain how LP members perceive a green LP in psychological and economic terms.

Social Exchange Theory posits that an exchange is evaluated by two partners in terms of benefits (i.e., positive consequences of the exchange) and costs (i.e., negative consequences of the exchange) (Emerson, 1976). Individuals generally aim to maximize their benefits and minimize costs and only want to be involved in an exchange if they expect a positive net return (Krafft *et al.* 2017). Benefits and

costs can be of different types, namely, economic, psychological, cognitive, or social. In line with the social norm of reciprocity, each party receiving something may reciprocate the benefits they receive (Gouldner, 1960). In the case of LPs, members have access to a better value proposition and/or receive tangible (e.g., a gift) and intangible rewards (such as recognition, grades), and reciprocate when they feel that they are treated favorably (Singh and Sirdeshmukh, 2009). The cost-benefit analysis occurring during an exchange is a subjective process (Homans, 1961; Blau, 1964) based on personal values (Hamon and Bull, 2016). Consumers consider the opportunity to become involved in an exchange by evaluating the likelihood of satisfying their personal values (Davlembayeva *et al.*, 2020). When the LP targets green purchase or green non-purchase behaviors, the company recognizes that these actions require extra effort from the LP member. Indeed, the adoption of green purchase and non-purchase behavior is described as difficult and associated with economic and psychological costs. By rewarding green behavior, a green LP acknowledges consumers' efforts by offering incentives that lead to consistency and continuity in attitudes and actions towards the environment, reinforcing their self-perception as "green consumers" (Whitmarsh and O'Neill, 2010). In this respect, compared to conventional LPs, green LPs can be more in line with personal values.

The difference between an LP rewarding green non-purchase behavior and an LP rewarding green purchase behavior lies in the type of non-purchase *versus* purchase actions that are required to get the reward (Table I). However, both green LPs are considered to offer greater psychological value than a conventional LP as they reinforce the customers' self-esteem. Both can increase overall positive evaluation of the self: the positive impact customers have on the environment can lead them to perceive greater self-worth (Venhoeven *et al.*, 2016). When a green LP is other-oriented (i.e., altruistic), customers do not obtain benefits from their past green purchase or non-purchase behavior. The perceived value of such a program resides in the altruistic nature of the reward. The perception of an altruistic LP can thus be explained in the light of philanthropic behavior. Altruism is defined as a desire to give to others rather than to oneself (Batson, 2011). Altruistic behavior ignores any benefits the donor receives and is a "selfless act" (White and Pezola, 2009). This type of LP can contribute to consumer well-being and self-achievement, and may thus enhance self-perception and deliver greater psychological value.

Given all of the above, we investigated whether each type of green LP increases psychological value compared to a conventional LP where consumers accumulate rewards points based on their overall spending (regardless of product category). Consequently, we hypothesize the following:

H1a: Compared to a conventional LP, an LP rewarding green non-purchase behavior will display higher perceived psychological value.

H1b: Compared to a conventional LP, an LP rewarding green purchase behavior will display higher perceived psychological value.

H1c: Compared to a conventional LP, a green altruistic LP will display higher perceived psychological value.

Like a conventional LP, a green LP rewarding green non-purchase or purchase behavior is based on self-oriented and hard rewards (Liu and Mattila, 2016; Kreis and Mafael, 2014). Thus, the economic benefits related to rewards that customers may derive from their green behavior may be similar to those of a conventional program. However, the economic costs of green LPs include the effort that customers need to exert when undertaking certain green purchase or non-purchase behaviors (Papista *et al.*, 2018): e.g., looking for information about which green products are eligible, planning new green non-purchase behaviors, and so on. These economic costs might lead customers to perceive green LP designs as less valuable in economic terms than a conventional LP. Finally, with regard to green altruistic LPs, given that hard rewards are offered to environmental charities in such LPs, the economic value is not aimed at the member of the LP. It could thus be hypothesized that when an LP offers other-oriented rewards, the perceived economic value is lower than when it offers selfish rewards.

Consequently, we formulate the following hypotheses:

H2a: Compared to a conventional LP, an LP rewarding green non-purchase behavior will display lower perceived economic value.

H2b: Compared to a conventional LP, an LP rewarding green purchase behavior will display lower perceived economic value.

H2c: Compared to a conventional LP, a green altruistic LP will display lower perceived economic value.

Green LPs encompass different reward designs. As a result, they tend to differ with regard to the way consumers perceive the value of each type of green LP design in both psychological and economic terms. As far as psychological value is concerned, LPs rewarding green non-purchase behaviors may well increase the self-esteem of LP members compared to LPs rewarding green purchase behaviors. Rewarding green non-purchase behaviors that do not involve a monetary transaction could lead members to perceive the exchange as closer to the green values they share with the company (Kumar, 2019) since this behavior transcends their initial transactional relationship, potentially leading customers to feel more special and recognized for their personal values (Venhoeven *et al*., 2016). Conversely, LPs that incentivize green purchase practices reward customers for behaviors that occur through monetary transactions. Customers may thus feel that the reward is related to the amount of money they spend, diluting the role of personal values in the exchange. Finally, we might expect LPs that reward customers for both green purchase and non-purchase behavior to display greater psychological value compared to green altruistic LPs. In donating LP points to a green charity, customers support an entity that will in turn positively contribute to the environment. Hence, they feel they can exert an indirect impact on the environment. On the contrary, LPs rewarding purchase or non-purchase green behavior accrue benefits for customers for their environmental actions, recognizing them for their direct impact on the environment. This in turn reinforces their self-perception as "green consumers" (Whitmarsh and O'Neill, 2010). Based on the above considerations, we formulate the following hypotheses:

H3a: Compared to an LP rewarding green purchase behavior, an LP rewarding green non-purchase behavior will display a higher perceived psychological value.

H3b: Compared to a green altruistic LP, an LP rewarding green non-purchase behavior will display a higher perceived psychological value.

H3c: Compared to a green altruistic LP, an LP rewarding green purchase behavior will display a higher perceived psychological value.

As far as economic value is concerned, LPs rewarding green non-purchase behavior do not require LP members to extend a monetary cost in order to engage in green behavior. Thus, due to the differences in financial costs, the perceived economic value of an LP rewarding green non-purchase behavior is

higher compared to an LP rewarding green purchase behavior associated with the money spent on selected products. Finally, green altruistic LPs invite members to transfer the LP's economic benefits to other parties (e.g., charities), while LPs rewarding green purchase and non-purchase behavior provide economic benefits for the LP members (Eason *et al*., 2015). Therefore, we might expect customers to perceive green altruistic LPs as lower in terms of economic value compared to both LPs rewarding green purchase and non-purchase behavior. Consequently, we hypothesize the following:

H4a: Compared to an LP rewarding green purchase behavior, an LP rewarding green non-purchase behavior will display higher perceived economic value.

H4b: Compared to a green altruistic LP, an LP rewarding green non-purchase behavior will display higher perceived economic value.

H4c: Compared to a green altruistic LP, an LP rewarding green purchase behavior will display higher perceived economic value.

Figure 1 proposes a representation of the study framework.

[Insert Figure 1 here]

Methodology

An experimental protocol was implemented in an online setting in order to manipulate the three types of green LP designs identified in the literature. Data collection was conducted using an online questionnaire. The invitation with the URL link to the online survey was posted on social media. A snowball sampling procedure was used as it facilitates distribution of the survey to the target population (Molinillo *et al.*, 2020). All participation was voluntary, and no credits were given. Participants indicated one grocery retailer where they regularly do their shopping and then reported if they were enrolled in the retailer's LP. Grocery retailing was chosen as the industry of reference as it displays a high rate of subscription to LPs.[2] Participants then completed a questionnaire that included a randomly assigned scenario situation in which the grocery retailer where they usually shop was potentially changing its LP design. This approach is similar to that of Kim *et al.* (2012) and ensures that respondents give feedback on a retailer they are familiar with, thereby reducing the potential for extraneous variance that may be

attributable to unfamiliarity, disinterest, or negative preconceptions regarding a retailer (Easton *et al.*, 2015). The survey informed participants that the questionnaire was anonymous and included statements encouraging honesty in order to reduce social desirability bias (Larson, 2019). Respondents were randomly assigned to the different scenarios. The scenario manipulation is available in Appendix A.

A total of 1,016 actual shoppers were involved in the experiment. Scenario 1 (S1) corresponds to the control group, where a conventional LP was tested (N = 254). Scenario 2 (S2) got the respondents to imagine that their LP was going to begin rewarding green non-purchase behavior (N = 254). Scenario 3 (S3) displayed an LP rewarding green purchase behavior (N = 254), and finally, Scenario 4 (S4) presented an LP that allowed the value of the points accumulated by the customers to be given to an environmental protection association (N = 254). All three green scenarios were carefully linked to the environment to enhance consistency. For greater realism, the scenarios' design was prepared in consultation with a company specialized in LP management. The programs described in the scenarios were found to be in line with currently existing green LPs.

The measurement tools were taken and adapted from the existing academic literature (see Appendix B). LP perceived value was measured through two dimensions highlighted by Kreis and Mafael (2014), namely, psychological value and economic value. Internal consistency of each scale (indicated by Cronbach's alpha) exceeded the 0.70 threshold for acceptable reliability (Nunnally 1978).

No significant differences were found across the four groups (see Appendix C) in terms of gender ($\chi2 = 0.000$, $p = 1.00$), age ($\chi2 = 0.15$, $p = 1.00$), social classification ($\chi2 = 12.22$, $p = 0.43$), educational level ($\chi2 = 11.79$, $p = 0.23$), store format ($\chi2 = 7.99$, $p = 0.14$), retailers ($\chi2 = 23.76$, $p = 0.48$), store visit frequency ($\chi2 = 16.544$, $p = 0.74$), number of loyalty cards owned ($\chi2 = 15.63$, $p = 0.21$), satisfaction toward the LP chosen to complete the survey ($F = 0.24$, $p = 0.87$), satisfaction toward the retailer ($F = 0.76$, $p = 0.51$), LP membership ($\chi2 = 0.01$, $p = 1.00$), loyalty toward the retailer ($F = 0.02$, $p = 0.99$), or sensitivity to sustainable consumption ($F = 0.16$, $p = 0.92$). Hence, the random assignment was implemented correctly. More information on the sample is also available in Appendix C.

Results

Testing the effects of LP design on perceived value

The hypotheses were tested using ANOVAs that considered LP design as a factor with four levels (1 = conventional LP, 2 = LP rewarding green non-purchase behavior, 3 = LP rewarding green purchase behavior, and 4 = green altruistic LP allowing the customer to donate loyalty points to an environmental protection association), with each dimension of the perceived value as the dependent variable. Table III shows the descriptive statistics.

[Insert Table III here]

The results reveal a significant main effect of LP design on psychological ($F(3, 1015) = 46.45$, $p < 0.01$) and economic ($F(3, 1015) = 10.76$, $p < 0.01$) values. We then used Scheffé's multiple comparison tests to compare each condition on the two dimensions of perceived value. The results of these pairwise comparisons appear in Table IV.

[Insert Table IV here]

Regarding psychological value, the LP rewarding green non-purchase behavior generates higher perceived value than the conventional LP (M = 4.70 *versus* 3.32, $p < 0.01$). The same significant difference is observed when we compare the conventional LP with the LP rewarding green purchase behavior (M = 4.36, $p < 0.01$) or the green altruistic LP (M = 4.21, $p < 0.01$). The results show that each type of green LP scores significantly higher than the conventional LP. As a result, H1a, H1b and H1c are supported.

As far as perceived economic value is concerned, pairwise comparisons show that - contrary to our hypothesis - the LP rewarding green non-purchase behavior displays a higher and not a lower perceived economic value than the conventional LP (M = 5.56 *versus* 5.20, $p = 0.02$). Consequently, H2a is not supported. The LP rewarding green purchase behavior does not display a significant difference when compared to the conventional LP (M = 5.20 *versus* 5.20, $p = 1.00$). Thus, H2b is also

not supported. Finally, the green altruistic LP scores significantly lower than a conventional LP (M = 4.38 *versus* 5.20, $p = 0.02$), supporting H2c.

The comparison of green LPs reveals interesting results. Regarding the perceived psychological value, no significant difference emerges between the LP rewarding green non-purchase behavior and the LP rewarding green purchase behavior (M = 4.70 *versus* 4.36, p = 0.06). H3a is therefore not supported. The LP rewarding green non-purchase behavior displays higher perceived value than the green altruistic LP (M = 4.70 *versus* 4.21, $p < 0.01$), thereby supporting H3b. Finally, H3c is not supported as no difference was found in terms of perceived psychological value between the green altruistic LP and the LP rewarding green purchase behavior (M = 4.36 *versus* 4.21, $p = 0.67$).

With reference to economic value, the LP rewarding green non-purchase behavior displays higher perceived economic value than the LP rewarding green purchase behavior (M = 5.56 *versus* 5.20, $p < 0.01$), thereby supporting H4a. Moreover, the LP rewarding green non-purchase behavior demonstrates a higher economic value than the green altruistic LP (M = 5.56 *versus* 4.38, $p < 0.01$) as well as the LP rewarding green purchase behavior (M = 5.20 *versus* 4.38, $p < 0.05$). Thus, H4b and H4c are also supported. Table V summarizes the evidence supporting the hypotheses.

[Insert Table V here]

Robustness check

Previous studies have shown that LPs' perceived value varies with age, gender, initial loyalty to the retailer, and LP membership (Lee *et al.*, 2014; Molinillo *et al.*, 2021, Raimondo *et al.*, 2008). Consequently, a robustness check was conducted with these variables included as covariates. The results of the ANCOVA remain significant, with gender affecting psychological ($F(7,1008) = 4.33$, $p = 0.04$) and economic ($F(7,1008) = 7.37$, $p = 0.01$) value. The same effect is observed with age for psychological ($F(7,1008) = 7.43$, $p = 0.01$) and economic value ($F(7,1008) = 18.63$, $p < 0.1$). Initial loyalty to the retailer also has a positive effect on both psychological ($F(7,1008) = 24.65$, $p < 0.01$) and economic ($F(7,1008) = 50.44$, $p < 0.01$) values. Finally and more interestingly, regarding initial LP membership, we observed no significant effect on either psychological ($F(7,1008) = 0.12$, $p = 0.73$) or economic

values (F(7,1008) = 0.69, $p = 0.41$). Hence, customers who are members of an LP did not discern higher perceived psychological or economic value from the green LP (compared to the conventional LP) than non-members. This result differs from prior research that suggests that members of an LP are more satisfied with their previous exchanges thanks to their LP (Lee *et al*., 2014) and identify more with the retailer than non-members (Maity and Gupta, 2016). The inclusion of these covariates did not change the substantive findings. The results still showed a significant main effect of LP design on perceived psychological ($F(7, 1008) = 46.41$, $p < 0.01$) and economic ($F(7, 1008) = 40.84$, $p < 0.01$) value. Thus, the robustness check confirms the results displayed in the main analysis.

General discussion and conclusions

Theoretical and managerial implications

This research contributes to the debate on the redesign of LPs by examining customers' perceptions of green LPs in service management in general and in retail in particular. More specifically, we investigated the effects of three types of green LP: 1) rewarding green non-purchase behavior; 2) rewarding green purchase behavior; and 3) allowing customers to donate their loyalty points to an environmental protection charity for perceived value dimensions (namely, perceived psychological and economic value). It appears that green LPs can thus be an effective alternative to go beyond the limitations and maturity of conventional LPs (Dorotic *et al.*, 2012; Kumar, 2019). Our results show that not all green LPs are equal and the way they are designed can have contrasting effects on the LP's perceived value dimensions. Consequently, it is important to consider the different dimensions of perceived value to understand how customers evaluate LPs. In this respect, several key findings emerged. First, introducing a green LP can lead to higher perceived psychological value than a conventional LP. Empirical evidence shows that any type of green LP is able to offer more perceived psychological value than a conventional LP. Supported by Social Exchange Theory (Emerson, 1976), the study shows that customers perceive benefits more than cost at psychological level when they are asked to undertake certain green behaviors. This is also evident when considering the green altruistic LP, the only green LP that involves rewards which are not self-oriented. In donating their points to an environmental protection charity, LP members enhance their well-being and the positive image of themselves within their social community. The green

altruistic LP thus delivers high perceived psychological value. Finally, the comparison between the three types of green LPs reveal that they do not differ in terms of delivering psychological value. Only the rewarding of green non-purchase behavior was found to deliver higher psychological value than the green altruistic LP, pointing to the importance of including reward opportunities that take non-purchase customer actions into account.

Second, as far as perceived economic value is concerned, the results point to a more complex pattern than expected. Contrary to our expectations, the LP rewarding green non-purchase behavior improves the LP's perceived economic value compared to a conventional LP. One possible explanation could come from Social Exchange Theory, as we know that consumers compare benefits and costs when judging the value of something (Emerson, 1976; Singh and Sirdeshmukh, 2009). When the LP rewards green non-purchase behavior, no financial costs are required to gain monetary rewards. On the contrary, to obtain monetary rewards with a conventional LP, customers need to spend money. They therefore probably take these factors into account, without considering the other costs attached to green non-purchase behavior.

Concerning the LP rewarding green purchase behavior, the effect on economic value is not significantly greater than a conventional LP, since both LPs are based on self-oriented and hard rewards (Liu and Mattila, 2016; Kreis and Mafael, 2014). This result may be explained by the fact that customers only pay attention to the monetary benefits associated with LPs rewarding green purchase behavior that are similar to those offered by conventional LPs (i.e., each euro spent in the store is rewarded with the same number of loyalty points) and do not take the costs associated with the LP into consideration (Papista *et al*., 2018).

With regard to the green altruistic LP, as expected, the perceived economic value is significantly lower compared to a conventional LP. Prior research has already demonstrated that altruistic rewards are not effective drivers of intention to join (Eason *et al*., 2015) or to enhance participation in an LP (Hwang and Choi, 2020). This can be explained by the fact that the reward is directed towards others rather than oneself. Customers thus forgo their reward and give it away, so the perceived economic value is lower. Finally, when comparing green LPs together in economic terms, significant differences emerge, with the green LP rewarding green non-purchase behavior delivering higher economic value than all the

other green LPs. Given that this type of LP does not involve monetary costs and that the LP's benefits reward the LP members, it appears to be the most popular in economic terms.

Developing a green LP thus appears to be a promising option in the drive to maintain and strengthen the customer relations. Indeed, the literature shows that customer engagement and corporate social responsibility are linked to customer loyalty (Jarvis *et al.*, 2017; O'Brien *et al.*, 2015, 2020). However, not all green LPs appear to deliver the same value. We show that green LPs rewarding green non-purchase behavior delivers by far the highest economic and psychological value compared to the other green LPs. As a result, this type of LP appears to be the best choice in terms of optimizing perceived value, followed by the LP rewarding green purchase behavior, and lastly the green altruistic LP. When we controlled the responses to LP membership, the same effects are observed on perceived psychological and economic value.

The present study has several important implications for managers in the retail sector on how to implement green LPs, taking the issue further than before and inciting managers in other service industries to add a green dimension to their loyalty programs. Banks, insurers, hotels, mobile services, and all other service providers are currently exploring new ways to retain customers and redesign their LPs. The empirical evidence of our study suggests that the three types of green LP identified can be adapted to any industry in line with sector specificities, norms, and conventions. In a hotel, for instance, customers can be rewarded for adopting green non-purchase behaviors (such as saving water by not changing bed linen daily, not using single-serving soap bars, or arriving by train) with loyalty points. A bank might consider rewarding green purchase behaviors of customers who invest their savings in green investment plans (green finance) or green non-purchase behavior such as opting to receive statements and other documents in digital format instead of paper. Finally, the green altruistic LP is easy to transfer to every sector as long as the cause being funded is consistent with the service provider's core business. For instance, an airline company might allow its customers to donate their "miles" to an association that transports sick children from developing countries for surgery elsewhere in the world (instead of financing an environmental association). Even if the degree of involvement and purchase frequency differs across industries, customers may still be expected to evaluate the perceived value of a green LP by comparing benefits and costs in psychological and economic terms. When publicizing the switch

from a conventional LP to a green LP, businesses are encouraged to leverage the psychological dimension to ensure that current and prospective LP members clearly perceive the new LP's value. We also advise companies to consider LPs that focus more on green non-purchase behavior as they are the most likely to increase perceived value. However, developing a green LP should also be considered in light of overall CSR commitment and the company's environmental impact. For instance, if a company develops a green LP but finds itself involved in a reputational crisis that could undermine its responsible commitments, its CSR image may be called into question, leading to negative customer perceptions. The development of a green LP must therefore be part of a broader, robust CSR strategy, creating synergies between the various activities conducted (for example, donations to local charities, sale of local products).

Limitations and future research

We believe that our study offers useful insights in the field of LP management. Nonetheless, some limitations need to be acknowledged that we present in this section along with a number of suggestions for future research. It should be noted that the experimental protocol led the respondents to envisage a green version of the LP of their choice. To increase ecological validity and overcome the "intention – behavior gap" (Hulland and Huston, 2021), which can be important in a survey related to CSR, it could be interesting to run a field experiment with a company that develops a green LP of this kind and to collect real behaviors. Future research could collect field data to externally validate these results. An alternative could be to include a social desirability bias measure in the analysis to control the effects of the bias (Larson, 2019).

Our research design tested three green LP alternatives in isolation without investigating their potential interaction effects in the event of simultaneous integration into an LP. However, in practice, the three aforementioned types of green LP can also be cumulative. For example, H&M offer "conscious loyalty points" to shoppers who buy items from the H&M sustainable fashion line (green purchase behavior rewarded) or who use their own shopping bags (green non-purchase behavior rewarded). Our study only investigated "green LPs" that focus solely on environmental causes. It would be interesting

to take this further and to envisage pro-social LPs that consider and reward behaviors related to the defense of social causes.

The suitability of a public relations investment or a loyalty reward may vary according to the different stages of the relationship (Henderson *et al.*, 2011). A possible extension could be to try to establish whether the perception of an LP depends on the degree of maturity of the customer–company relationship (Cambra-Fierro *et al.*, 2018). Moreover, LP effectiveness differs according to industry characteristics (Belli *et al*., 2022). The findings of this study need to be generalized, keeping in mind its limitations. Our results are context-specific (i.e., grocery retailing) and may differ in a specialty retailing context (e.g., apparel and consumer electronics) or other service contexts (Roy *et al*., 2020). As a result, it is important to test the effect of green LPs in different settings such as utilities, banking, and insurance. In such contexts, the role of the community is more developed than in grocery retail, which could potentially offer insights into the effect of a green LP on interaction value (Kreis and Mafael, 2014).

Finally, it could be interesting to understand the long-term impact of participation in a green LP: does engagement with a green LP lead to an increase in green purchasing behavior, warm glow feelings, and life satisfaction? Exploring this issue could offer insights into the role of green LPs in improving general well-being.

Notes

[1] https://www.aflac.com/about-aflac/corporate-citizenship/default.aspx?utm_medium=multiple&utm_source=vanity&utm_campaign=corpcomm_2015&utm_term=acsr#

[2] https://www.lsa-conso.fr/programme-de-fidelite-qui-sont-les-chouchous-dans-l-alimentaire,333236

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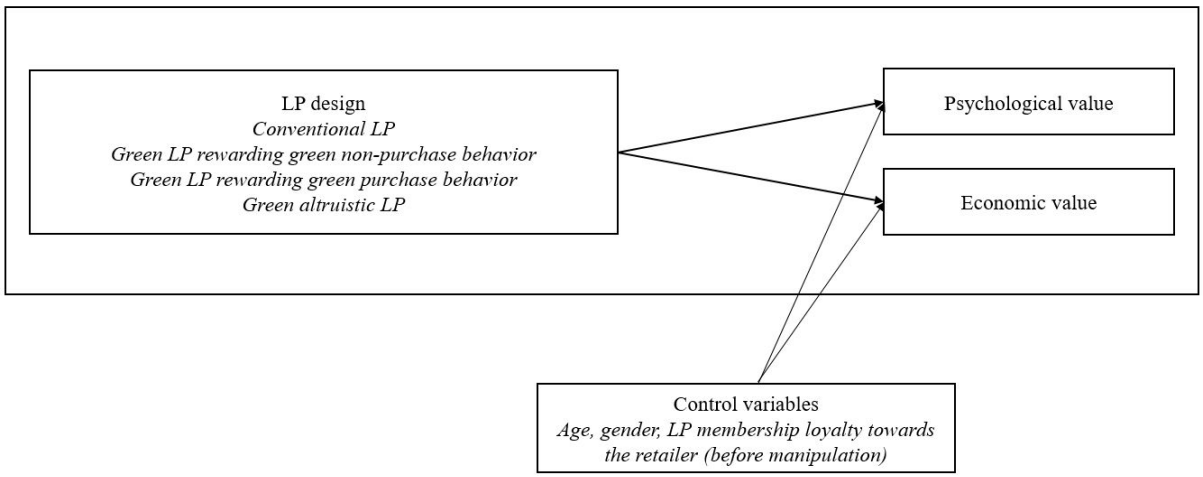
Redesigning loyalty marketing for a better world:
The impact of green loyalty programs on perceived value

Figure 1. Research framework



Redesigning loyalty marketing for a better world:
The impact of green loyalty programs on perceived value

Table I. Characteristics of green LPs

	Green LP		
	LP rewarding green non-purchase behavior	LP rewarding green purchase behavior	Green altruistic LP
Beneficiary of economic reward	Self	Self	Other-oriented
Nature of cost	Non-monetary cost	Monetary cost	Monetary cost
Point structure (reward accumulation method)	Sustainable behavior not alienated by monetary expenditure in the store (for example, bringing one's own bag)	Target category program (for examples, green product purchasing)	Continuity program (all type of products bought)
Examples	The Body Shop, H&M	Carrefour, H&M	Tesco, Marks & Spencer, Etam

Table II. Review of literature on green LPs

Authors	Definition of green LP	Dimensions of green LP studied			Type of article		Research objectives and context	Theory	Methodology	Main factors	Main dependent variables	Key findings
		LP rewarding		Green altruistic LP	Empirical	Conceptual						
		Green non-purchase behavior	Green purchase behavior									
Eason *et al.* (2015)	A variation of traditional LP formats where rewards benefit a third party – a charity			✓	✓		Examining variation in traditional LP formats on customer reactions Clothes shoppers	Social exchange theory Corporate Social Responsibility (CSR)	Scenario-based experiment: • Fictitious LP • Favorite store Study 1: Undergraduate students (n=328) Study 2: General respondents (n=416)	Benefit type (self, altruistic or mixed) Fee-based LP	Intention to join LP Intention to increase purchasing	Membership fees reduce intention to join. But intention to increase purchasing increases when the LP rewards are altruistic or self-oriented.
Hwang and Kandampully (2015)	LP encouraging consumer purchases of socially responsible products		✓	✓	✓		Identifying factors influencing responses to green LPs Grocery retailing	Cognitive hierarchy model Associative network theory	Scenario-based experiment • Fictitious LP • Fictitious retailer General respondents (n=350)	CSR perception (beliefs and feeling of gratitude) Perceived value of green LP	Intention to participate in LP	Customers' CSR-perception enhance attitudes toward a green LP and participation intentions. The overall perceived value of green LP improved consumer
Giebelhausen *et al.* (2016)	Initiative that has a stated goal of improving the natural environment utilizes the voluntary	✓		✓	✓		Understanding the effects of green LP participation on customer satisfaction Hospitality (hotel and restaurant)	Impure altruism and "warm glow effect" Signaling theory	Field study restaurant customers (n=76) Field study hotel customers (n= 602)	Participation in green LP Self-rewards Altruistic rewards	Warm glow Satisfaction	Participating in a green LP is associated with higher satisfaction. This is explained by a "warm glow effect"

	efforts of the sponsoring organization's customers and offers incentives as rewards in exchange for participating.								Scenario based experiment: • Fictitious LP • Fictitious Hotel (n=596) Behavioral experiment • Fictitious LP • Fictitious retailer (n=552)	Mixed rewards		
Liu and Mattila (2016)	Program that rewards customers who exhibit green behaviors	✓			✓		Examining reactions to preferential treatment in LP when associated with CSR Hospitality (hotel)	Signaling theory Halo theory	Scenario based experiment: • Fictitious LP • Fictitious hotel (n=297)	Program (green vs conventional and member vs bystander)	Pro-sociality Satisfaction Status perception	Green LP mitigates the negative bystander effect while maintaining the positive effects of preferential treatment on members' service encounter satisfaction
Kumar (2019)	Tools used by firms to engage in cause-related marketing efforts. It is designed to incorporate both a tangible (elements impacting short term transactions) and intangible (elements that	✓		✓		✓	Identifying how firms can integrate CSR within LPs Presenting a cause- related loyalty marketing framework					Discussion of the evolution of a new dominant logic for LPs Benefits of green LPs concern consumers, firms, society and environment.

	encourage pro-social behavior) dimension.											
Hwang and Choi (2020)	An LP including altruistic rewards reflecting consumers' increasing awareness of and positive reactions to firms' pro-social marketing efforts			✓	✓		Examining how reward types interact with gamification to affect consumer responses Restaurant	Stimulus-Organism-Response theory Self-determination theory Social exchange theory	Experiment: • Fictitious LP • Fictitious coffee shop (n=191)	Program (gamified or not) Reward type (self vs altruistic)	Playfulness Attitude toward LP LP Loyalty	Gamified LP increases loyalty to LP. Self-oriented rewards have a greater positive impact on LP loyalty than altruistic rewards. The mediating role of playfulness is conditional upon the reward type (greater for self-oriented reward)
This study	An LP that conveys company's contribution to the well-being of society and could be designed through the type of rewards (self vs altruistic) and the reward accumulation method.	✓	✓	✓	✓		Comparing the effectiveness of three green LP designs Grocery store	Social exchange theory	Scenario based experiment: • Fictitious LP • Frequent retail store (n=1,016)	Green LP designs	Perceived value (economic and psychological)	Green LPs are effective alternative to conventional LP and add psychological value. Green LPs based on green non-purchase behavior are better in terms of perceived value

Table III. Descriptive statistics

	LP perceived value	
	Psychological value	*Economic value*
Scenario 1 Conventional LP	3.32 (1.53)	5.20 (1.37)
Scenario 2 LP rewarding green non-purchase behavior	4.70 (1.35)	5.56 (1.00)
Scenario 3 LP rewarding green purchase behavior	4.36 (1.33)	5.20 (1.23)
Scenario 4 Green altruistic LP	4.21 (1.36)	4.38 (1.44)

Table IV. Results of multiple comparison tests

	LP perceived value	
	Psychological value	*Economic value*
(Scenario 1) – (Scenario 2)	-1.38***	-0.37*
(Scenario 1) – (Scenario 3)	-1.04***	0.01
(Scenario 1) – (Scenario 4)	-0.89***	0.82***
(Scenario 2) – (Scenario 3)	0.34	0.37*
(Scenario 2) – (Scenario 4)	0.49***	1.18***
(Scenario 3) – (Scenario 4)	-0.15	0.82***

Notes: Scenario 1 = Conventional LP; Scenario 2 = LP rewarding green non-purchase behavior; Scenario 3 = LP rewarding green purchase behavior; Scenario 4 = Green altruistic LP. Significant. *p < 0.05, **p < 0.01, ***p < 0.001.

Table V. Summary of the hypothesis

Hypothesis	Type of value	Support
H1a: LP rewarding green non-purchase behavior > Conventional LP	Psychological	Yes
H1b: LP rewarding green purchase behavior > Conventional LP	Psychological	Yes
H1c: Green altruistic LP > Conventional LP	Psychological	Yes
H2a: LP rewarding green non-purchase behavior < Conventional LP	Economic	No
H2b: LP rewarding green purchase behavior < Conventional LP	Economic	No
H2c: Green altruistic LP < Conventional LP	Economic	Yes
H3a: LP rewarding green non-purchase behavior > LP rewarding green purchase behavior	Psychological	No
H3b: LP rewarding green non-purchase behavior > Green altruistic LP	Psychological	Yes
H3c: LP rewarding green purchase behavior > Green altruistic LP	Psychological	No
H4a: LP rewarding green non-purchase behavior > LP rewarding green purchase behavior	Economic	Yes
H4b: LP rewarding green non-purchase behavior > Green altruistic LP	Economic	Yes
H4c: LP rewarding green purchase behavior > Green altruistic LP	Economic	Yes

Note: The assumptions read as follows: H1a - Compared to a conventional LP, an LP rewarding green non-purchase behavior displays a higher (>) perceived psychological value.

Appendices
Redesigning loyalty marketing for a better world:
The impact of green loyalty programs on perceived value

Appendix A. Scenarios used

Let us imagine the following situation: the retailer has changed its current loyalty program and now offers you the following program.

Scenario 1: Conventional LP

This retailer decides to reward all your purchases (all product categories) and offers you the following program:
- Each euro spent in the store is rewarded with loyalty points.
- No matter what product you buy, you will receive loyalty points.
- These points are then converted into euros which can be deducted from your next purchases.
- Your points can be converted at any time.
- There is no minimum number of points required to convert points into cash.

Scenario 2: LP rewarding green non-purchase behavior

This retailer decides to reward your sustainable behavior and sustainable daily actions and offers you the following program. You earn points when:
- You bring your own reusable shopping bags
- You buy products without packaging
- You bring your own packaging (delicatessen, cheese, meat, bread, etc.).
- You bring back batteries, light bulbs and cartridges to be put into the bins provided for this purpose
- You bring back your old household appliances for recycling

These points are then converted into euros that can be deducted from your next purchases.
Your points can be converted at any time.
There is no minimum to convert points into cash.

Scenario 3: LP rewarding green purchase behavior

This retailer decides to reward your green and sustainable product purchasing and offers you the following program. You earn points when:
- You buy organic products (AB label)
- You buy seasonal products
- You buy local products (products from less than 200 km away)
- You buy eco-labelled products (a label guaranteeing that the product respects the environment)
- You buy products in bulk

These points are then converted into euros that can be deducted from your next purchases.
Your points can be converted at any time.
There is no minimum to convert points into cash.

Scenario 4: Green altruistic LP

This retailer decides to reward all your purchases (all product categories) and offers you the following program:
- Each euro spent in the store is rewarded with loyalty points.
- No matter what product you buy, you will receive loyalty points.
- These points are then converted into euros.
- You can donate your reward to an environmental protection association.
- Your points can be donated at any time.
- There is no minimum to convert your cash reward into a donation.

Appendix B: Measurement tools used

Perceived value (Kreis and Mafael, 2014)		
(1=strongly disagree, 7=strongly agree)		α
Psychological value	Scenario 1	0.88
The LP would help me feel better about myself	Scenario 2	0.86
I would enjoy being a member of the LP	Scenario 3	0.85
I think I would deserve to be rewarded for my purchases at the retailer	Scenario 4	0.83
I feel like the LP would make me special compared to other customers		
Economic value	Scenario 1	0.84
It would be economically reasonable for me to become a member of the LP	Scenario 2	0.79
The LP would offer me additional value for my money	Scenario 3	0.84
I think the LP would make it more attractive to shop at the retailer	Scenario 4	0.82

Notes. Scenario 1: Conventional LP; Scenario 2: LP rewarding green non-purchase behavior; Scenario 3: LP rewarding green purchase behavior; Scenario 4: Altruistic LP

Appendix C. Statistics related to the involved sample

		Scenario 1 (N=254)	Scenario 2 (N=254)	Scenario 3 (N=254)	Scenario 4 (N=254)
Age	18-24	32.7%	33.5%	32.7%	32.7%
	25-34	19.3%	19.3%	19.7%	19.3%
	35-44	13.8%	13.0%	13.8%	13.8%
	45-54	22.8%	22.8%	22.4%	22.8%
	> 55	11.4%	11.4%	11.4%	11.4%
Gender	Female	68.9%	68.9%	68.9%	68.9%
	Male	31.1%	31.1%	31.1%	31.1%
Social classification	Students	21.7%	19.7%	25.2%	22.4%
	Lower occupations	36.6%	35.4%	39.4%	35.0%
	Intermediate occupations	13.0%	12.2%	9.4%	10.6%
	Higher occupations	18.9%	21.3%	20.5%	24.4%
	Unemployed	9.8%	11.4%	5.5%	7.4%
Education level	No	13.%	11.4%	14.2%	13.8%
	High school	22.8%	15.0%	16.1%	13.0%
	Bachelor	23.6%	24.4%	23.6%	25.2%
	> Bachelor	40.6%	49.2%	46.1%	48.0%
Loyalty cards number	0	2.8%	3.5%	3.9%	5.1%
	1-3	20.5%	24%	16.5%	21.7%
	3-10	48.0%	51.6%	46.5%	48.4%
	11-20	22.8%	15.4%	27.2%	20.5%
	< 20	5.9%	5.5%	5.9%	4.3%
Store visit frequency	More than once a week	18.6%	18.0%	14.6%	14.6%
	Once a week	52.3%	56.4%	61.0%	58.7%
	Less than once a week	29.1%	25.6%	24.4%	26.7%
Store format	Drive	13.0%	10.2%	10.7%	9.1%
	Hypermarket	26.9%	29.9%	33.9%	27.4%
	Convenience store	20.6%	17.4%	19.4%	18.7%
	Supermarket	39.5%	42.5%	40.0%	44.8%
Retailer	Auchan	9.1%	11.4%	9.4%	12.6%
	Carrefour	20.5%	20.9%	21.3%	19.3%
	Casino	1.2%	3.2%	3.1%	3.9%
	Intermarché	11.4%	11.0%	8.7%	13.0%
	Leclerc	23.2%	24.4%	24.0%	26.4%
	Lidl	8.7%	7.5%	9.8%	9.4%
	Monoprix	2.0%	3.1%	1.3%	2.8%
	U	17.3%	14.6%	15.7%	9.8%
	Other	6.6 %	3.9%	6.7%	2.8%
Satisfaction toward the preferred LP		4.67	4.73	4.65	4.66
Initial satisfaction toward the retailer		5.10	4.98	5.12	5.08
Initial loyalty towards the retailer		4.78	4.76	4.79	4.78
Interest for sustainable consumption		4.50	4.53	4.49	4.47

Notes. Scenario 1: Conventional LP; Scenario 2: LP rewarding green non-purchase behavior; Scenario 3: LP rewarding green purchase behavior; Scenario 4: Altruistic LP

Redesigning loyalty marketing for a better world:
The impact of green loyalty programs on perceived value

JSTP-07-2022-0145

Rewritten draft, after considering the comments and suggestions of reviewer 1

First submission: 11-Jul-2022
Sent in revised form after the first round of revision: 08-Oct-2022
Sent in revised form after the second round of revision: 20-Dec-2022
Sent in revised form after the third round of revision: 21-Apr-2023

Summary of changes

Dear Editor Dr. Chatura Ranaweera,

Thank you very much for the recommendation of "minor revision" of our manuscript initially entitled "Redesigning loyalty marketing for a better world: The impact of pro-social loyalty programs on perceived value" (JSTP-07-2022-0145), submitted to the *Journal of Service Theory and Practice*. Based on Reviewer 1's comments and suggestions, we have further revised the manuscript. We hope that following these new modifications, publication can now be considered.

As suggested, we integrated all Reviewer 1's comments and suggestions that we believe have significantly improved this new version of our manuscript:
- We replaced the word "pro-social LP" by "green LP". As you probably noted, we also changed the title in accordance with the reviewer's comment. The new title is: "*Redesigning loyalty marketing for a better world: The impact of green loyalty programs on perceived value*."
- We clarified the notion of a conventional LP before introducing our hypotheses.
- We revised Figure 1
- We highlighted the managerial implications of our research more clearly.

Lastly, we carefully went through the manuscript to improve its clarity and readability. In addition, we sent the manuscript once again to a professional language editing service. We strongly believe that the updated writing substantially enhances the quality of the text and the overall manuscript. Please find attached a certificate from the copy editor.

Below, we detail the changes made point-by-point.

Once again, thank you for your positive recommendations and the time spent on our manuscript. Please do not hesitate to contact us if you have any questions.

The Authors.