

# Rewards that undermine customer loyalty? A motivational approach to loyalty programs

Kyongseok Kim<sup>1</sup> | Sun Joo (Grace) Ahn<sup>2</sup>

<sup>1</sup>Towson University

<sup>2</sup>University of Georgia

## Correspondence

Kyongseok Kim, Department of Mass Communication and Communication Studies, Towson University, 8000 York Road, Towson, MD 21252.  
Email: kyongseokkim@towson.edu

## Abstract

Guided by the framework of self-determination theory (SDT), this study examined the effects of external rewards on undermining customers' intrinsic motivation to engage in a retail loyalty program. Two experiments revealed that participants who received a salient, controlling reward (i.e., a promise of reward with an explicit requirement and deadline, without options of choice) reported lower intrinsic motivation to use the loyalty program than participants who received a nonsalient, autonomy-supportive reward (i.e., a promise of reward with a less explicit requirement and no deadline, with options of choice). However, the undermined intrinsic motivation of those who received the salient, controlling reward was enhanced when they were given verbal feedback acknowledging their potential negative feelings associated with using the loyalty program. These findings provide important practical implications for designing a more effective loyalty program.

## KEYWORDS

brand loyalty, extrinsic motivation, intrinsic motivation, loyalty programs, Self-Determination Theory (SDT)

## 1 | INTRODUCTION

Loyalty programs are a marketing tactic aimed at building and maintaining brand loyalty through a planned reward scheme based on customers' purchase history (Sharp & Sharp, 1997; Yi & Jeon, 2003). Since 1981, when *American Airlines* introduced the world's first loyalty program, *AAAdvantage* (Petersen & Winship, 2005), loyalty programs have been adopted by a wide array of industry sectors (e.g., retail, travel/hospitality, and financial services), and have become increasingly popular among consumers (Berry, 2015; Kivetz & Simonson, 2002). According to a recent industry report (Berry, 2015), the total number of U.S. loyalty memberships reached 3.3 billion in 2014, a 26% increase from 2.6 billion in 2012, and each household belonged to an average of 29 loyalty programs.

An integral element of loyalty programs is the achievement of prespecified rewards by meeting the required amount of purchases and, for this reason, loyalty programs are often called *reward programs* (e.g., *Southwest Rapid Rewards*, *Marriott Rewards*, *Capital One Venture Rewards*, and *My Starbucks Rewards*) (Kim, Shi, & Srinivasan, 2001). The current study focuses specifically on loyalty programs providing monetary rewards. In fact, a majority of the loyalty programs in the U.S. marketplace (83%) offer financial rewards, such as points that can be redeemed later for flight miles and free hotel stays (Berry, 2015), though some programs recognize their loyal customers through nonfinancial means—for example, building a hierarchical

structure among members and bestowing a higher membership status (e.g., Gold and Platinum) to frequent buyers (Drèze & Nunes, 2009; Ivanic, 2015).

Many behavior-change strategies using rewards are predicated on the principle of operant conditioning (Skinner, 1953). This behaviorist principle holds that external rewards (i.e., rewards awarded from external sources such as points) can control behavior such that when administered directly following the desired behavior (e.g., points given immediately after purchase), rewards can increase the likelihood that the behavior will take place again. Indeed, rewards for reinforcing desired behaviors are applied to a wide range of contexts—notably, in education (e.g., scholarships) and workforce management (e.g., overtime pay) (Ryan & Deci, 2000a).

However, operant conditioning also predicts that when the rewards are terminated, the likelihood of the behavior returns to prereward levels (Skinner, 1953). In line with this observation, marketing scholars have expressed concern that loyalty programs based on the operant conditioning of the reward–response association may not always lead to true brand loyalty. That is, a sheer focus on increasing the sensitivity to external rewards may result in a lack of emotional bonds with the brand (e.g., Noordhoff, Pauwels, & Odekerken-Schröder, 2004; Yi & Jeon, 2003). This concern may also pertain to recent criticisms of loyalty programs: “so-called loyalty programs appear unrelated to the cultivation of customer brand loyalty and the creation of customer assets” (Shugan, 2005, p. 185).

Research in social psychology and education has documented that external rewards—despite their ability to induce a desired action on a short-term basis—are likely to weaken *intrinsic motivation* (i.e., a person's innate tendency to pursue novelty, challenge, and/or enjoyment from an activity *per se* rather than from the instrumental value of the activity) (Deci, 1971; Deci, Koestner, & Ryan, 1999). For example, Deci (1971) found that monetary rewards lowered college students' motivation to engage in a learning activity. In fact, this stream of research provides evidence counterintuitive to the common understanding about the use of rewards as an effective motivational strategy.

While this *undermining impact* of rewards on intrinsic motivation (Deci et al., 1999) has been investigated mostly in the domains of learning (e.g., Deci, 1971; Ross, 1975) and prosocial behavior (e.g., Osbaldiston & Sheldon, 2003; Weinstein & Ryan, 2010), it has rarely been examined in a consumer context. The phenomenon, however, seems readily applicable to consumer participation in loyalty programs, leading to such predictions that (1) current users' intrinsic motivation to keep engaging in a loyalty program can be lowered by reward contingencies, and (2) their lowered intrinsic motivation can in turn lead to decreased brand loyalty.

Previous studies built on self-determination theory (hereafter, SDT)—a theory of extrinsic and intrinsic behavioral regulation (Deci & Ryan, 1985)—found that completion-contingent rewards introduced with explicit requirements for reward achievement (i.e., a salient reward) was detrimental to intrinsic motivation (e.g., Ross, 1975). Given that most loyalty programs tend to rely on reward structures that impose requirements and deadlines for reward achievement (i.e., salient) and limit reward options (i.e., controlling) for various reasons (e.g., costs, promotional needs, etc.) (Deci & Ryan, 1987; Kim et al., 2001), Study 1 seeks to assess the effects of a salient, controlling reward on weakening customers' intrinsic motivation to use a retail loyalty program, compared to those of a relatively less salient, controlling reward. Study 2 proposes a way of enhancing intrinsic motivation in the presence of a salient, controlling reward. In the long run, understanding the nature of rewards can lead to important strategy insights for companies employing or planning to adopt loyalty programs.

## 2 | STUDY 1

### 2.1 | Self-determination theory (SDT)

SDT is a social psychological theory of motivation that delineates the intricacies of human cognitive and behavioral regulation (Baumeister & Vohs, 2007). While social psychological theories tend to regard human behavior as subordinate to social contexts in which actors are embedded, SDT further assumes that human behavior may not always be dictated by social contexts; that is, humans have innate propensities to behave autonomously (Deci & Ryan, 1991). Accordingly, SDT postulates two sources of motivation that drive human behavior: intrinsic and extrinsic sources (Ryan & Deci, 2000b).

### 2.1.1 | Intrinsic vs. extrinsic motivation

SDT offers a framework for explicating the degree to which an action is self-determined and postulates two broad types of motivation: intrinsic and extrinsic motivation (Deci & Ryan, 1985). The term *intrinsic motivation* is defined as engagement in an activity “for its inherent satisfactions rather than for some separable consequences” (Ryan & Deci, 2000c, p. 56). Humans have a natural tendency to engage in interesting and playful activities, regardless of reward contingencies. A case in point is a student working hard on homework because (s)he derives pleasure from the learning experience *per se* or a customer participating in a loyalty program because he thinks the program itself is enjoyable.

However, not every activity people engage in is intrinsically motivated. To this end, the term *extrinsic motivation* refers to “a construct that pertains to whenever an activity is done to attain some separable outcomes [(e.g., rewards)]” (Ryan & Deci, 2000c, p. 60). Externally motivated individuals tend to perform an activity for its instrumental value rather than for enjoyment from the activity *per se*—for example, a student working hard on homework to receive a good grade in the class or a customer using a loyalty program purely to obtain rewards.

### 2.1.2 | Need for autonomy

SDT postulates that intrinsically motivated behaviors are driven by individuals' psychological needs (Deci & Ryan, 1991). One primary psychological need that drives intrinsic motivation is the need for autonomy (Deci & Ryan, 1987). The term *need for autonomy* refers to one's “desire to experience an *internal* [italic added] perceived locus of causality with regard to action” (Deci & Ryan, 1991, p. 243); that is, the construct represents the degree to which a person perceives that he has control over his own behavior.

SDT-grounded studies identify several important social psychological (or contextual) factors that affect one's need for autonomy: choices, requirements, deadlines, and rewards (e.g., Deci, 1971; Deci et al., 1999; Ross, 1975; Ryan & Deci, 2000a). An environment supportive of the need for autonomy is likely to allow a person to have *choices* as a means of expressing the self (Deci & Ryan, 1987). Providing choices implies that the situation is flexible and free from pressures to act in a certain way (Ryan & Deci, 2000b). In contrast, an environment imposing an explicit *requirement* and *deadline* on an actor is likely to inhibit satisfaction of the need for autonomy, thus undermining intrinsic motivation (Deci & Ryan, 1987; Ross, 1975). For instance, past studies found that completion-contingent rewards that require individuals to finish a specific task by a predetermined deadline, similar in nature to the reward structure of most loyalty programs, weakened intrinsic motivation (Deci, 1971; Deci et al., 1999). In response to these rewards, a person may shift the locus of causality (i.e., the perceived agent of control) from intrinsic (e.g., enjoyment) to extrinsic sources (i.e., rewards), consciously or unconsciously realizing that he has become “a pawn to the source of external rewards” (Deci, 1971, p. 105).

## 2.2 | Hypotheses

Based on the premises of SDT, Study 1 aims to test the undermining effects of extrinsic rewards on intrinsic motivation in the context of loyalty programs. When loyalty programs dictate how customers can obtain rewards by issuing prerequisite purchase amounts, it is highly likely that customers perceive loyalty programs as more or less controlling (as opposed to supporting their needs for autonomy) (Kim et al., 2001). However, ways of imposing requirements and deadlines for reward achievement and the range of reward choices may vary with programs. Therefore, Study 1 compares the effects of a salient, controlling (SC) reward (i.e., a promise of reward with an explicit requirement and deadline and without options of choice, typical of most loyalty programs) with those of a nonsalient, autonomy-supportive (NA) reward (i.e., a promise of reward with a less explicit requirement, no deadline, and with options of choice) on customers' intrinsic motivation to stay engaged with the loyalty program. It is anticipated that for customers who receive the SC reward, which does not address customers' need for autonomy, their intrinsic motivation will be lower than those who receive the NA reward, which addresses customers' need for autonomy. The following hypothesis is posed:

**H1:** Individuals who receive a salient, controlling (SC) reward will report significantly lower intrinsic motivation to engage in the loyalty program than individuals who receive a nonsalient, autonomy-supportive (NA) reward.

SDT-grounded studies stress the importance of intrinsic motivation because it is often associated with positive cognitive, affective, and behavioral outcomes (Deci & Ryan, 1991; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). These studies found that individuals higher in intrinsic motivation had greater interest and excitement toward the action under consideration, which in turn led to stronger performance and longer term behavior change than individuals with lower intrinsic motivation. In the context of education, for instance, Ryan and Connell (1989) showed that intrinsically motivated students had better long-term memory for materials, presented more enjoyment of school, and made greater effort to learn than their extrinsically motivated counterparts. These findings lead to the prediction that customers lower in intrinsic motivation will present less interest and make less effort to obtain rewards, directly counteracting the intended outcome of loyalty programs. Deci, Eghrari, Patrick, and Leone (1994) operationalized this internal coherence between one's motivation and behavior as a positive correlation between the self-reported measure of intrinsic motivation and relevant attitudinal and/or behavioral outcomes—in the context of this study, brand loyalty. Thus, the following hypothesis is posed:

**H2:** Individuals' intrinsic motivation to engage in the loyalty program will be positively correlated with their brand loyalty.

## 2.3 | Method

### 2.3.1 | Sample and design

A sample ( $N = 205$ ) was obtained via *Amazon Mechanical Turk* (MTurk), a crowdsourcing Internet marketplace that enables social scientific

researchers to collect data from human subjects (Amazon Mechanical Turk, 2015). Research suggests that MTurk can provide more demographically diverse and reliable samples, compared to convenience samples of students (e.g., Buhrmester, Kwang, & Gosling, 2011). Only individuals residing in the United States were allowed to participate in the experiment by using MTurk's qualification requirement. There was also a screening procedure in which participants were asked to verbally describe a random image to verify their English proficiency (i.e., the image annotation test; Rashtchian, Young, Hodosh, & Hockenmaier, 2010). The average age of the participants was 37.90 years at the time of data collection ( $Min = 22$ ;  $Max = 75$ ;  $SD = 11.33$ ). A total of 46.3% ( $n = 95$ ) of the participants were female whereas 53.7% ( $n = 110$ ) were male. All participants were users of the loyalty program under investigation.

A two-group (salient, controlling [SC] reward vs. nonsalient, autonomy-supportive [NA] reward), between-subjects design was used to test the hypothesized effects of reward type on individuals' self-reported intrinsic motivation to use the loyalty program and brand loyalty. After the participants were randomly assigned to the two groups, they were asked to look over a screenshot of the smartphone application of the loyalty program (see Appendix 1) and respond to questions assessing intrinsic motivation and brand loyalty. Additional question items measuring other individual differences (attitude toward the brand and product involvement) and demographic questions followed. The participants received a monetary reward after they completed the online experiment.

### 2.3.2 | Experimental stimuli

Two versions of a loyalty program presenting either a SC reward or NA reward were created for experimental purposes. Both versions took the form of *Starbucks'* loyalty program, *My Starbucks Rewards*, a typical loyalty program that enables customers to earn reward points that can be traded in for a beverage or food item after they make a predetermined amount of purchases. The number of members in the program is an estimated 17 million (Perez, 2016).

The SC reward was manipulated by specifying an explicit requirement (e.g., "Earn two more stars") and a due date for reward achievement (e.g., "Offer valid until December 31, 2016") and presenting no options to choose the resulting reward (e.g., "Get our *Holiday Spice Flat White*"). The NA reward was manipulated by presenting a less explicit requirement (e.g., "Earn more stars") and no due date for reward achievement and offering options to choose the resulting reward (e.g., "Get a free drink [whatever you want]"). In every other aspect, the two versions were identical in form and content (see Appendix 1).

### 2.3.3 | Pretest

A pretest was conducted as a manipulation check with 50 individuals who were using *My Starbucks Rewards* at the time of data collection; none of them participated in the main experiment. The perceived salience and controllability of the reward was measured with a 3-item, 7-point scale (1 = *strongly disagree* vs. 7 = *strongly agree*), consistent with the three ways of manipulating the SC and NA rewards in the experimental stimuli (e.g., Deci, Connell, & Ryan, 1989): "The program

seems to emphasize that rewards are contingent upon completion of the required amount of purchases" (requirement), "The program seems to require customers to achieve rewards by a certain due date" (deadline), and "The program seems to provide customers with choices and options in choosing rewards" (choice). Responses to the last item were reverse coded; the higher the score, the more salient and controlling the reward. The results of the pretest confirmed that individuals perceived the reward presented with the explicit requirement, deadline, and no options of choice as significantly more salient and controlling,  $M_{SC} = 4.81$ ,  $SD_{SC} = 0.84$  vs.  $M_{NA} = 3.69$ ,  $SD_{NA} = 0.88$ ,  $t(48) = 9.18$ ,  $p < 0.001$ , than the non-salient and autonomy-supportive reward. The manipulation was successful.

### 2.3.4 | Dependent variable measures

Participants' intrinsic motivation to use the loyalty program and brand loyalty were the two primary dependent variables measured to assess the effects of the SC and NA rewards. The 3-item, 7-point scale measuring intrinsic motivation with an emphasis on one's interest and enjoyment toward a behavior was adapted from Ryan (1982) (e.g., "It is enjoyable to engage in the loyalty program"). Brand loyalty was measured using Kim, Morris, and Swait's (2008) 5-item, 7-point scale that assesses both affective (e.g., "Overall, I am loyal to Starbucks") and behavioral (e.g., "I always go to Starbucks, if I want to have coffee") loyalty. Appendix 2 presents the measurement items used in this study, previous studies that adopted the same measures, and their reliability scores as measured by Cronbach's  $\alpha$ .

## 2.4 | Results and discussion

An analysis of covariance (ANCOVA) was performed to test H1, with intrinsic motivation as the dependent variable. Participants' attitudes toward the brand, brand loyalty, and involvement with the product were controlled as covariates because of the variables' potential influences on intrinsic motivation (e.g., interest and enjoyment) to use the loyalty program (MacKenzie & Lutz, 1989; Zaichkowsky, 1994).

The ANCOVA results demonstrated significant differences between participants who received the SC reward and those who received the NA reward in their intrinsic motivation to engage in the loyalty program (H1). Those in the SC condition reported significantly lower intrinsic motivation, compared to those in the NA condition ( $M_{SC} = 4.70$ ,  $SD_{SC} = 1.84$  vs.  $M_{NA} = 5.74$ ,  $SD_{NA} = 1.35$ ,  $F[1, 200] = 4.43$ ,  $p = 0.037$ ,  $\eta^2 = 0.03$ ), thereby supporting H1.

A partial correlation analysis was conducted to test the relationship between intrinsic motivation and brand loyalty (H2) controlling for attitude toward the brand and product involvement. Table 1 shows the zero-order correlations among the four variables entered into the partial correlation analysis. A significant positive correlation was found between intrinsic motivation and brand loyalty ( $r = 0.25$ ,  $p < 0.001$ ), suggesting that customers lower in intrinsic motivation to engage in the loyalty program might have weaker brand loyalty (or vice versa). Therefore, H2 was supported.

Study 1 provided empirical evidence for the undermining effects of a SC reward on customers' intrinsic motivation to use the loyalty program, a finding consistent with the proposition of SDT. It was also

**TABLE 1** Zero-order correlations between intrinsic motivation, brand loyalty, attitude toward the brand, and product involvement (Study 1,  $N = 205$ )

Variables	1	2	3	4
1. Intrinsic motivation	—			
2. Brand loyalty	.62***	—		
3. Attitude toward the brand	.76***	.65***	—	
4. Product involvement	.62***	.54***	.73***	—

Statistically significant at \*\*\* $p < 0.001$ .

revealed that reduced intrinsic motivation is associated with lower brand loyalty, which sheds further light on the unintended, negative impact of SC rewards on brand loyalty. An additional mediation analysis using the PROCESS procedure (Hayes & Preacher, 2014) showed no direct effect of reward type (1 = SC vs. 0 = NA) on brand loyalty ( $b = -0.02$ ,  $SE = 0.29$ ,  $p = 0.93$ ) but a significant indirect effect via intrinsic motivation ( $b = 0.35$ , bootstrap  $SE = 0.18$ , bootstrap confidence interval = 0.02–0.73), suggesting that the effects of reward type on brand loyalty were fully mediated by intrinsic motivation. However, the results should be interpreted with caution in that the current factorial design with cross-sectional data might not be fully adequate to infer causal relationships between the variables.

There is mounting concern over loyalty programs that many of them produce only short-term revenue increase, failing to maintain and engage their customers (e.g., Palmieri, 2015; Shugan, 2005). This concern corresponds with the fact that only 9.5 of 29 U.S. household loyalty memberships were active as of 2014 (Berry, 2015). Combined with the findings of Study 1, the trend suggests that many loyalty programs may be in need of intrinsically motivating elements that can help encourage customers' continued participation over time and counterbalance the potential reduction in brand loyalty.

Inevitably, however, most loyalty programs continue to rely on reward structures that impose requirements and deadlines and limit reward options (i.e., SC rewards) for a number of reasons (e.g., costs, promotional needs, etc.). Then, the most practical approach may be to explore how companies may promote customers' intrinsic motivation to use loyalty programs while continuing to offer SC rewards.

## 3 | STUDY 2

Despite the undermining impact of extrinsic rewards on intrinsic motivation evidenced by Study 1, it may not be a realistic approach to forego offering extrinsic rewards from the fields and disciplines in which rewards have been used for a long time as an effective motivational strategy, such as education, workforce management (Ryan & Deci, 2000a), and marketing communication. Rewards are also essential for loyalty programs to function as intended (Kim et al., 2001). Study 2 aims to build on the findings of Study 1 by exploring a logical and practical approach to maximize customers' intrinsic motivation to continually engage in loyalty programs while offering extrinsic rewards.

In addition to explaining the potential, negative influence of extrinsic rewards on intrinsic motivation, SDT also proposes a mechanism through which one's intrinsic motivation can be enhanced, even in the presence of extrinsic rewards—a mechanism labeled *internalization* (i.e., “the process of transforming external regulations into internal regulations”; Deci et al., 1994, p. 120). Study 2 examines the process of internalization in the context of designing a more effective loyalty program.

### 3.1 | Internalization

SDT categorizes human motivation into two broad types, extrinsic and intrinsic motivation (Deci & Ryan, 1985). However, it should be noted that SDT views motivation not as a dichotomy but as a continuum bounded at one end by extrinsic motivation and at the other end by intrinsic motivation (Ryan & Deci, 2000b, 2000c). Indeed, people at times regulate their behaviors, striving to internalize the value of unenjoyable but important activities (e.g., learning) and, thus, a motive resulting from internalization lies somewhere *between* being extrinsic and intrinsic on the motivation continuum (Deci et al., 1994).

Specifically, SDT postulates two different processes of internalization: introjection and integration (Deci & Ryan, 1991). *Introjection* takes place when an individual recognizes and takes in the value of an extrinsically driven activity but does not fully assimilate the activity toward the self (e.g., justifying one's participation in a loyalty program as an effort to be an economical consumer) (Deci et al., 1994). On the other hand, *integration* occurs when the value of an extrinsically driven activity is recognized and assimilated to the self (e.g., justifying one's participation in a loyalty program to feel a sense of achievement by earning rewards). Although internally driven, integration is still different from intrinsic motivation with which a person purely enjoys the activity *per se*. Accordingly, on the motivation continuum, introjection is located relatively closer to extrinsic motivation whereas integration is located relatively closer to intrinsic motivation (Ryan & Deci, 2000b, 2000c).

### 3.2 | Role of positive feedback in facilitating internalization

Findings of previous SDT-grounded studies have indicated that positive verbal feedback could enhance intrinsic motivation to engage in an activity, which was not intrinsically motivated, when the feedback was worded to acknowledge one's potential negative feelings toward the activity (e.g., Deci & Ryan, 1987; Deci et al., 1994). For example, Deci et al. (1994) found that a sample of college students presented significantly higher intrinsic motivation to complete a tedious experimental task when their feelings of dislike or disinterest toward the task were acknowledged (e.g., “I understand that you might not find it interesting”). When requested to engage in an activity that is not inherently enjoyable, a person would experience an internal conflict (e.g., reluctance). An acknowledgement of the conflict associated with involvement in the activity can help mitigate the conflict and promote internalization by conveying the idea that the negative feelings are legitimate.

In previous studies, acknowledgement, along with choice, requirement, and deadline, has often been considered as a factor that influences the extent to which the environment is perceived as supportive

of one's need for autonomy (e.g., Deci, Ryan, & Williams, 1996; Hagger et al., 2007; Koestner, Ryan, Bernieri, & Holt, 1984). That is, the provision of an acknowledgment signals that the environment is less controlling. Koestner et al. (1984) found that when requirements for an activity (painting) were imposed in a controlling manner (e.g., “You have to keep the paints clean”), they tended to diminish the participants' intrinsic motivation, but when the requirements were provided with an acknowledgement (e.g., “I know some people don't like to be neat all the time, but now is a time for being neat”), they did not have significant negative effects on intrinsic motivation.

### 3.3 | Hypotheses

Study 2 aims to test the joint effects of the SC reward and verbal feedback of acknowledgement on one's internalization of engaging in the loyalty program. In addition to the SC reward (a promise of reward with an explicit requirement and deadline for reward achievement, without options of choice), participants were given verbal feedback designed to acknowledge their potential negative feelings toward using the loyalty program (e.g., “We understand earning stars wasn't easy”). According to Deci (1971), the impact of verbal feedback on intrinsic motivation might be similar to the internal satisfaction obtained from the activity. Therefore, it is predicted that incorporating verbal feedback of acknowledgement to the SC reward will help enhance intrinsic motivation, facilitating internalization. However, the effects of adding the feedback to the NA reward on intrinsic motivation would be minimal, largely due to the high level of intrinsic motivation the NA reward would produce (see, Austin & Brunner, 2003 for the ceiling effect of measurement). The following hypothesis is posited:

**H3:** Individuals who receive a salient, controlling (SC) reward with verbal feedback of acknowledgement will report significantly higher intrinsic motivation to engage in the loyalty program than individuals who receive the salient (SC) reward only.

### 3.4 | Method

#### 3.4.1 | Sample and design

A sample ( $N = 111$ ) was obtained via MTurk. Only individuals residing in the United States were allowed to participate in the study by using MTurk's qualification requirement. Similar to Study 1, an image annotation test was implemented before the participants received the experimental materials by asking them to verbally describe a random image to verify their English proficiency (Rashtchian et al., 2010). The average age of the participants was 40.54 years at the time of data collection ( $Min = 23$ ;  $Max = 72$ ;  $SD = 11.14$ ), and 54.1% of them ( $n = 60$ ) were male whereas 45.9% ( $n = 51$ ) were female. All participants were users of the loyalty program.

A 2 (reward type: salient, controlling [SC] reward vs. non-salient, autonomy-supportive [NA] reward)  $\times$  2 (feedback: present vs. absent) between-subjects design was used. Participants were randomly assigned to the four groups. The same procedures from Study 1 were implemented.

**TABLE 2** Pretest results (dependent variable: perceived salience/controllability)

Condition	n	Homogeneous Subset	
		1	2
SC	15	5.19 (0.91) <sup>a</sup>	
SC + F	15	4.56 (1.08)	
NA	15		3.93 (1.21)
NA + F	15		3.46 (0.74)
Sig		0.092	0.673

Note. Significant univariate differences with  $F(3, 56) = 15.06, p < 0.001$ .

SC, salient, controlling reward; SC + F, salient, controlling reward with feedback; NA, nonsalient, autonomy-supportive reward; NA + F, nonsalient, autonomy-supportive reward with feedback.

<sup>a</sup>Mean (standard deviation).

**TABLE 3** Pretest results (dependent variable: perceived acknowledgement)

Condition	n	Homogeneous Subset		
		1	2	3
NA + F	15	5.13 (0.91) <sup>a</sup>		
SC + F	15		4.83 (1.54)	
NA	15		4.42 (1.59)	
SC	15			3.56 (1.07)
Sig		1.00	0.223	1.00

Note. Significant univariate differences with  $F(3, 56) = 6.16, p < 0.01$  (001).

SC, salient, controlling reward; SC + F, salient, controlling reward with feedback; NA, nonsalient, autonomy-supportive reward; NA + F, nonsalient, autonomy-supportive reward with feedback.

<sup>a</sup>Mean (standard deviation).

### 3.4.2 | Experimental stimuli

In addition to the two reward-type conditions (SC or NA) used in Study 1, two feedback conditions (present or absent) were created, resulting in four different experimental stimuli: the SC reward with feedback (SC + F), SC reward only, NA reward with feedback (NA + F), and NA reward only. The feedback was given in the form of a verbal acknowledgement from *Starbucks* that the company is aware of customers' efforts to achieve rewards and is grateful for their continued participation in its loyalty program ("We understand earning stars wasn't easy. Let us reward your commitment") (see Appendix 1).

### 3.4.3 | Pretest

To check the manipulations of reward salience/controllability and verbal feedback, a pretest was conducted with 60 individuals who were using *My Starbucks Rewards*; none of them participated in the main experiment. The same 3-item scale of perceived autonomy support from Study 1 was adopted to assess perceived reward salience and controllability. The results of the pretest confirmed that compared to those in the NA conditions (NA and NA + F), participants in the SC conditions (SC and SC + F) perceived the rewards they received as significantly more salient and controlling.

The efficacy of verbal feedback was assessed by using two 7-point items (1 = *strongly disagree* vs. 7 = *strongly agree*): "The program seems to understand well that the process of achieving rewards might be challenging" and "the program seems to address customers' emotions well," both of which were adapted from Ryan and Deci (2015). It was found that participants who received the SC or NA reward with the feedback were more likely to report that they felt their feelings were acknowledged than those who received the SC reward or NA reward only. Overall, the results confirmed that the manipulations were successful. Tables 2 and 3 summarize the pretest results.

### 3.4.4 | Dependent variable measure

The same questions from Study 1 that assessed intrinsic motivation to use the loyalty program were administered.

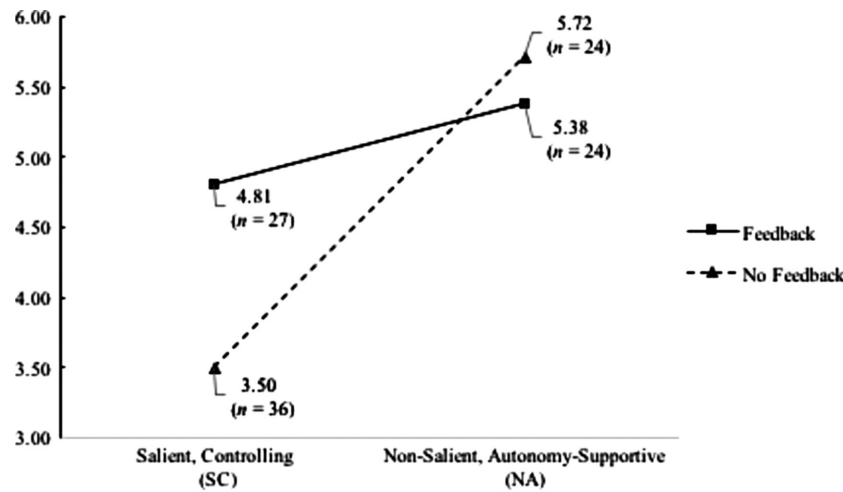
## 3.5 | Results and discussion

To test H3, an ANCOVA was conducted with the manipulations of reward type and feedback as independent variables, intrinsic motivation as the dependent variable, and attitude toward the brand, brand loyalty, and product involvement as covariates. The results indicated significant main effects of reward type ( $F[1, 104] = 4.25, p = 0.04, \eta^2 = 0.09$ ) and feedback ( $F[1, 104] = 10.03, p = 0.002, \eta^2 = 0.04$ ) and a significant interaction effect of reward type and feedback ( $F[1, 104] = 15.99, p < 0.001, \eta^2 = 0.13$ ) on intrinsic motivation. A Tukey's HSD post-hoc test revealed that the individuals who received the SC reward with feedback reported significantly higher intrinsic motivation to use the loyalty program ( $M_{SC+F} = 4.81, SD_{SC+F} = 1.62$ ) than those who received the SC reward only ( $M_{SC} = 3.50, SD_{SC} = 1.84$ ) ( $p = 0.003$ ), supporting H3. However, as expected, there was no significant difference in their intrinsic motivation between those who received the NA reward with the feedback ( $M_{NA+F} = 5.38, SD_{NA+F} = 0.85$ ) and those who received the NA reward only ( $M_{NA} = 5.72, SD_{NA} = 0.75$ ) ( $p = 0.17$ ). Figure 1 presents a summary of the results.

Overall, the findings of Study 2 demonstrated that customers' intrinsic motivation to engage in the loyalty program could be enhanced by offering feedback carefully worded to acknowledge their efforts and potential negative feelings toward using the program—particularly when their intrinsic motivation was significantly undermined by repeated external rewards.

## 4 | GENERAL DISCUSSION

The present study examined two major theoretical propositions of SDT, (1) the undermining impact of extrinsic rewards on intrinsic motivation and (2) internalization, in the context of loyalty programs. Overall, the findings indicated that the use of SC rewards might weaken individuals' intrinsic motivation to engage in the loyalty program, compared to NA rewards. It was also found that individuals' intrinsic motivation to use the loyalty program could be enhanced, even in the presence of the SC reward, by acknowledging their potential, negative feelings toward using the program.



**FIGURE 1** Results of Study 2

Note. The dependent variable, intrinsic motivation, was measured using a 7-point scale.

Rewards are pervasively employed as a means of controlling human behavior at micro and macro levels in society (Ryan & Deci, 2000a). At the micro level, for example, rewards are used to reinforce desirable behaviors at home and at school. At the macro level, rewards play a pivotal role in capitalistic societies where firms compete for limited resources and market share. Rewards are also the primary mechanism of advertising that attempts to subtly manipulate consumer behavior by promising desired outcomes for those who consume the right products.

Despite the persuasive power of rewards, some scholars have expressed concern that rewards can cause a serious and enduring problem (e.g., Deci, 1971; Deci et al., 1999; Ryan & Deci, 2000a). Reward contingencies tend to undermine individuals' intrinsic motivation, overriding their inherent tendencies to pursue challenge and enjoyment from activities and, in turn, replacing their internalized value—in the context of this study, brand loyalty. Findings of the present study demonstrated two major theoretical propositions of SDT: the undermining effects of extrinsic rewards on intrinsic motivation and internalization. It was evidenced that salient rewards with highly controlled structures (e.g., requirements, deadlines, and limited choices) weakened individuals' intrinsic motivation to engage in the loyalty program, and that diminished intrinsic motivation was related to decreased brand loyalty. It was also found that the weakened intrinsic motivation could be enhanced by providing positive verbal feedback of acknowledgement, particularly when customers were given a SC reward.

While prior research on loyalty programs has revolved around the effects of various characteristics of loyalty programs (e.g., required efforts to achieve rewards and types of rewards) on consumer decision to participate in loyalty programs and company profitability (e.g., Kivetz & Simonson, 2002; Luxton, 1998; Sharp & Sharp, 1997), few studies have paid attention to customer motivation to engage in loyalty programs and its relationship to brand loyalty (e.g., Suh & Yi, 2012). Although SDT has rarely been examined in advertising and marketing research, the current study demonstrated that SDT, as a theory of

motivational orientation (i.e., types of motivation), may serve as a useful theoretical framework to examine consumer motivation.

Findings from Study 1 suggest that companies may wish to reevaluate the costs and benefits of their current loyalty programs. A loyalty program, which can significantly reduce brand loyalty in the long run, may not be worth the peripheral benefits that the program may bring. Although the results from Study 1 point to a NA reward program as the structure with less negative impact on intrinsic motivation than a SC one, in most cases, it is practical and strategic for firms using loyalty programs to impose achievement requirements and deadlines and, also, to limit reward choices. To this end, Study 2 proposes a potential solution to this dilemma. Program managers can enhance customers' intrinsic motivation by actively providing verbal feedback that acknowledges customers' efforts and negative feelings toward the loyalty program.

Feedback is a primary element of successful loyalty programs, typically applied as an indication of customer progress over time toward the goal (e.g., "You've earned 10 stars") (Armbruster, 2014). However, as evidenced in Study 1, this type of feedback may have unintended, negative effects by emphasizing the rigid structure of the reward program, leading consumers to feel less at control and consequently less motivated to use loyalty programs. As suggested by the findings of Study 2, therefore, to design a more effective loyalty program, program managers should preemptively and directly address customers' feelings and deliver the company's acknowledgement of customers' challenges in participating in the loyalty program, rather than merely providing mechanical feedback on the customers' progress.

On the other hand, program managers should also be cautious in adopting verbal feedback of acknowledgement. The results of Study 2 demonstrated that participants who received the NA reward with verbal feedback of acknowledgement presented lower intrinsic motivation than those who received the NA reward only, though the difference was not statistically significant. The finding suggests that users might consider the feedback as an inauthentic acknowledgement holding a persuasive intent and perceive it as more or less salient and

controlling, particularly when the program already has elements supportive of users' need for autonomy (e.g., offering reward choices).

This study focuses primarily on the unintended, negative consequences of salient, extrinsic rewards on users' intrinsic motivation to engage in loyalty programs, yet should not be interpreted as a denial of the positive effects of those rewards. For instance, monetary rewards can attract new or low-involvement customers to loyalty programs and increase their behavioral loyalty (e.g., repurchase) (Sharp & Sharp, 1997; Verhoef, 2003). One pervasive problem has been that many loyalty programs use rewards as a short-term promotional incentive to temporarily boost the conditional probability of repeat-purchase behavior, thereby producing loyalty that is only transient (e.g., Shugan, 2005; Yi & Jeon, 2003). Industry practitioners also suggest that loyalty programs should reduce their reliance on monetary rewards and focus more on non-monetary rewards—in the context of this study, customized feedback—in order to make user experiences with loyalty programs more enjoyable (e.g., Bond Brand Loyalty, 2015; Schrage, 2015).

#### 4.1 | Limitations and future research

In evaluating the theoretical and practical implications of this study, the reader should also be aware of a few limitations. First, this study used only one product category, brand, and loyalty program. Although the participants of this study were all users of the loyalty program under investigation, and their levels of product involvement and attitude toward the brand were measured and statistically controlled, future research should apply multiple product categories with varying levels of involvement, brands, and loyalty programs.

This study used an actual brand (as opposed to a fictitious brand) and measured participants' loyalty to the brand as a dependent variable. Although using a fictitious brand permits assessment of its impact in a relatively controlled manner, the entire range of brand effects (e.g., brand loyalty) cannot be captured (Swaminathan, 2003). In the present study, a significant positive correlation was found between intrinsic motivation and brand loyalty, but questions remain for a potential causal relationship between the two variables. However, given the very nature of brand loyalty that develops over time in response to diverse external and internal factors (Kim, Morris, & Swait, 2008), in addition to intrinsic motivation, it is difficult to establish a causal relationship using a factorial design with cross-sectional data.

Many loyalty programs are now exploring non-monetary ways to reward their customers. For instance, video-game elements are integrated into loyalty programs not only to provide customers with tangible rewards (e.g., points, badges, and levels) but also to raise customers' intrinsic motivation to engage in the programs by enhancing their feelings of mastery and goal achievement as intangible rewards (i.e., gamification; Bogost, 2011; Deterding, 2012; Deterding, Sicart, Nacke, O'Hara, & Dixon, 2011). The use of these gamification elements in loyalty programs (e.g., whether the gamification elements indeed boost intrinsic motivation and can countervail the potential, negative effects of tangible rewards on intrinsic motivation) is an important area for future research.

Despite these potential limitations, the importance of this study should not be overlooked. As one of the earliest experimental inquiries into the undermining impact of rewards on customer use of loyalty programs using a novel theoretical framework (i.e., SDT), the findings of this study provide some useful implications for scholars and practitioners in the fields of advertising and marketing.

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**How to cite this article:** Kim K, Ahn SJ. Rewards that undermine customer loyalty? A motivational approach to loyalty programs. *Psychol Mark*. 2017;34:842–852. <https://doi.org/10.1002/mar.21026>

APPENDIX 1

Experimental stimuli

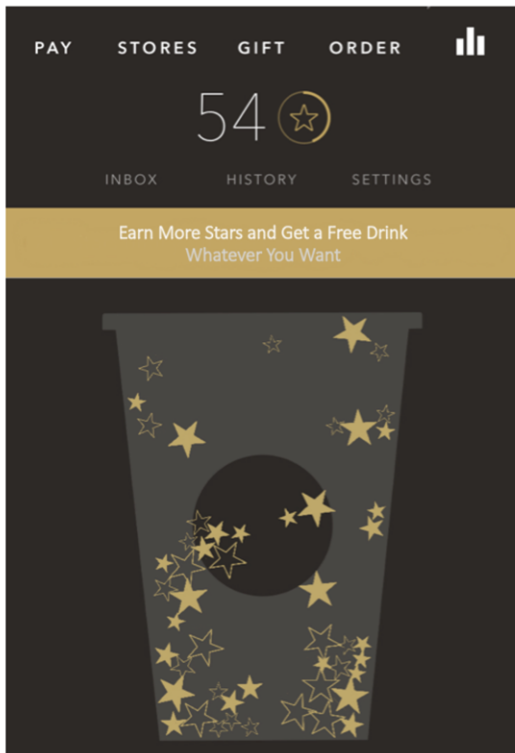
**Salient-Controlling Reward (SC)**



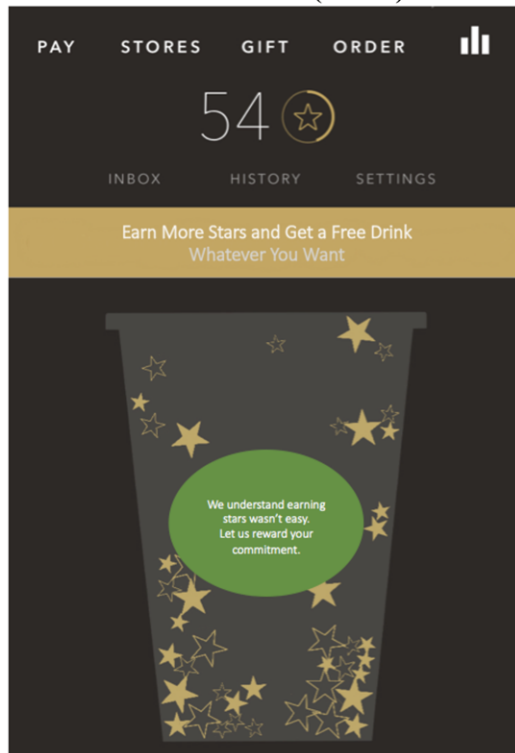
**Salient-Controlling Reward with Feedback (SC+F)**



**Non-Salient, Autonomy-Supportive Reward (NA)**



**Non-Salient, Autonomy-Supportive Reward with Feedback (NA+F)**



## APPENDIX 2

## Measurement items

Variables/Items <sup>a</sup>	Cronbach's $\alpha$		Source
	Study 1	Study 2	
Perceived salience/controllability	0.77	0.80	Deci et al. (1989)
1. The loyalty program seems to emphasize a specific goal in the number of purchases for a reward (requirement)			
2. The loyalty program seems to require customers to achieve rewards by a certain due date (deadline)			
3. The loyalty program seems to provide customers with choices and options in choosing rewards (choice) (R) <sup>b</sup>			
Intrinsic motivation	0.89	91	Ryan (1982)
1. It is interesting to engage in the loyalty program			
2. It is enjoyable to engage in the loyalty program			
3. It is fun to engage in the loyalty program			
Brand loyalty	90	0.91	Kim et al. (2008)
1. Starbucks is the first brand I look for, if I want to have coffee			
2. I always go to Starbucks, if I want to have coffee			
3. I usually go to Starbucks, if I want to have coffee			
4. Overall, I am loyal to Starbucks			
5. To me, various brand names of coffee house chains available in the market are similar			
Attitude toward the brand	91	94	MacKenzie and Lutz (1989)
To me, <i>Starbucks</i> is...			
1. Bad-good			
2. Unfavorable-favorable			
3. Unpleasant-pleasant			
Involvement with the product	0.88	89	Zaichkowsky (1994)
To me, coffee is...			
1. Unimportant-important			
2. Boring-interesting			
3. Irrelevant-relevant			
4. Unexciting-exciting			
5. Means nothing-means a lot			
6. Unappealing-appealing			
7. Mundane-fascinating			
8. Worthless-valuable			
9. Uninvolving-involving			
10. Needed-not needed (R)			

<sup>a</sup>Variables presented in order of appearance; all variables measured by a 7-point scale.

<sup>b</sup>Reverse coded.