Can economic bonus programs jeopardize service relationships?

Thorsten Hennig-Thurau · Michael Paul

Abstract Research findings on the impact of economic bonus programs on service relationships are contradictory. While some studies find positive effects of economic bonus programs on customer's relational behavior, other studies demonstrate negative effects. Building on self-determination theory, Dholakia (J Market Res 43(2):109–120, 2006) points at a possible explanation for these conflicting results, arguing that economic marketing programs have negative effects on self-determined customers when the program is perceived as controlling by them. By testing the effect of four different kinds of economic bonus programs on loyalty in an experimental setting using a nationwide representative sample of 768 participants, this research is the first that provides empirical evidence that economic bonus programs can indeed endanger service relationships by reducing customer's self-determination. Implications of our findings for the abundance of economic bonus programs offered to service customers these days are highlighted.

Keywords Bonus programs · Customer loyalty · Self-determination · Intrinsic motivation · Extrinsic motivation

1 Introduction

In many service industries, relationship bonus programs, which offer customers economic incentives have become an essential ingredient of service

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firms' endeavors to establish profitable long-term customer relationships. The relevance of economic bonus programs is supported by numerous trade publications that stress the potential of economic bonus programs for boosting firms' profitability and generating additional revenues through rewarding repeated patronage and customer loyalty (e.g., Baloglu 2002; Estell 2002; LaPointe 2002).

However, findings of scholarly research on the impact of economic bonus programs on customer loyalty and related outcomes are less euphoric. In a longitudinal analysis of the impact of a large Australian loyalty program on behavioral loyalty, Sharp and Sharp (1997) conclude that results are mixed and ''only two of the six loyalty program participant brands showed substantial excess loyalty deviations'' and both of these deviations ''were observed for non-members of the loyalty program as well as members'' (p. 473). Roehm et al. (2002) test the effect of different kinds of loyalty incentives on consumers' brand loyalty and even find that ''tangible incentives undermine post-program loyalty'' (p. 207).

Dholakia (2006) draws on Deci and Ryan's (2000) self-determination theory and proposes that the customer's striving for self-determination provides a possible explanation for such counterintuitive findings. Customer loyalty programs that are perceived by customers as ''controlling'' are argued to reduce customers' self-determination, leading to a reduced intrinsic motivation of the customer with regard to the offered service or product. Consistent with this argument, Dholakia finds that the offering of an economic incentive in form of a reminder coupon by a car service firm (i.e., a ''controlling'' activity by the firm) has a negative impact on the relational behavior of self-determined customers (i.e., customers that joined the car service firm on their own initiative), while he finds a positive effect of a (non-controlling) relational rewards program that includes economic benefits on the relational behavior of self-determined bank customers which are automatically enrolled in the program. As a result of these findings, Dholakia (2006) argues that the offer of controlling economic incentives deteriorates service relationships through a reduction of customers' self-determination.

While Dholakia's (2006) study makes an important contribution, the field-study character of his experiments did prevent him from collecting information on the proposed underlying psychological mechanisms. Specifically, he does not show that the customers' self-determination actually changes as a result of the customer loyalty program offer. As a consequence, alternative explanations for his findings cannot ruled out, such as customer self-selection and customers' ''greater preference for a firm and its products'' (Dholakia 2006, p. 119). The goal of this paper is to provide empirical evidence that the provision of economic bonus programs which are perceived as controlling indeed have negative effects on relationship marketing outcomes by decreasing the customers' self-determination and, subsequently, their intrinsic relational motivation. We also study the impact economic bonus programs have on the customers' extrinsic relational motivation, which can also be expected to influence relationship-marketing outcomes.

The paper is organized as follows. We present a conceptual model of economic bonus programs' impact on customer loyalty in a service context which links bonus programs with loyalty through self-determination and customers' relational motivation types and their relationship commitment states. We then describe the design and results of a role-playing experiment which tests the impact of four different economic bonus programs on relationship marketing outcomes using a nationwide representative quota sample of 768 consumers. The paper closes with implications for relationship marketing theory and the practical use of economic bonus programs by service firms.

2 A self-determination model of the impact of economic bonus programs on customer loyalty and switching

We argue that the provision of economic bonus programs, which are perceived as controlling has a negative effect on relationship marketing outcomes. This requires that a relationship, which is threatened by economic bonus programs is originally characterized by a high level of intrinsic relational motivation. The latter is defined here as the extent to which the consumer's relational behavior (i.e., his/her repeated shopping with a service provider) is motivated by the enjoyment the consumer receives from his/her relationship with the provider itself. The conceptual model shown in Fig. 1 illustrates the constructs and paths through which the proposed effect of economic bonus programs on relationship marketing outcomes will take place in a service-marketing environment. The model links customers' motivational states with different types of relationship commitment and, subsequently, customer loyalty and switch-

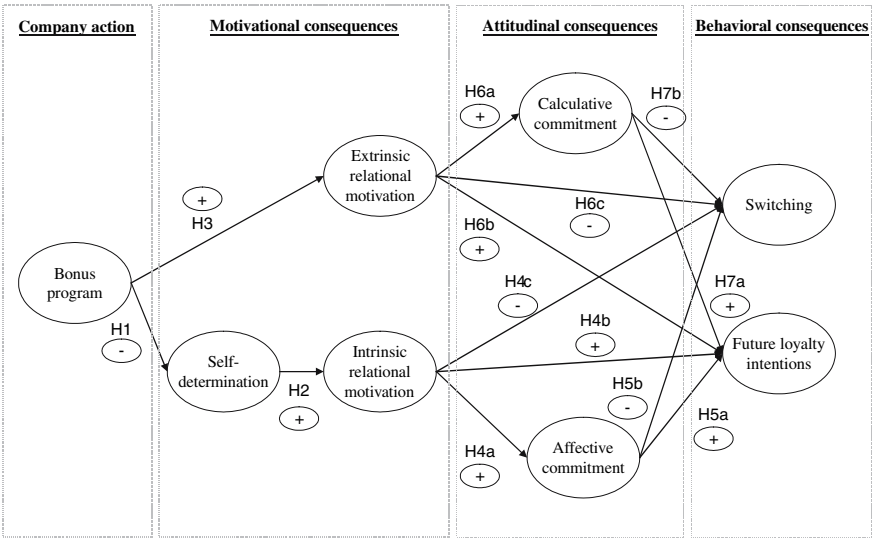

Fig. 1 Conceptual model

ing. It contains two basic pathways, namely an affective pathway which incorporates intrinsic relational motivation and affective commitment, and a cognitive pathway employing extrinsic relational motivation and calculative commitment.

We argue that economic bonuses reduce the customer's perception of relational self-determination, shifting the customer's locus of control from internal to external. Self-determination itself should then be positively correlated with the consumer's intrinsic relational motivation, as engaging in intrinsically motivated actions allows consumers to satisfy their basic need for self-determined and autonomous action (Deci and Ryan 2000, p. 233). Moreover, we propose that the economic bonus program will increase the consumer's extrinsic relational motivation, i.e., the extent to which the consumer's relational behavior is motivated by external incentives beyond the relationship (Ryan and Deci 2000, p. 71). This pathway is grounded on the argument that the provision of economic bonus programs will increase the customer's expectation to receive external rewards as a consequence of his/her participation in the relationship and that these rewards are considered as valuable by customers, with both expectancy and valence constituting main components of the motivation concept (Vroom 1964).

H1: The provision of economic bonus programs by a service provider has a negative impact on the customer's level of self-determination.

H2: The customer's level of self-determination has a positive impact on his or her intrinsic relational motivation.

H3: The provision of economic bonus programs by a service provider has a positive impact on the customer's extrinsic relational motivation.

Intrinsic and extrinsic relational motivations are argued to affect the consumer's loyalty to the service provider and his or her propensity to switch to another service provider both directly and indirectly, with the customer's relationship commitment serving as a partial mediator. Specifically, the customer's intrinsic relational motivation is proposed to have a positive influence on his or her affective commitment, which itself is expected to be positively linked with customers' future loyalty intentions and negatively linked with their propensity to switch. When a customer participates in a service relationship with a high level of enjoyment, this enjoyment will create an emotional bond between the customer and the service firm, which is central to the concept of affective commitment. In contrast, if fun and other positive emotions are absent from a relationship, affective commitment can hardly exist. The existence of a positive impact of affective commitment on customer loyalty and its negative impact on switching have been extensively demonstrated in the literature (e.g., Pritchard et al. 1999; Gustafsson et al. 2005).

In addition to its impact on future loyalty intentions and switching through affective commitment, we also envisage a direct impact of the consumer's relational motivation states on loyalty intentions and switching. This direct effect implies that loyalty intentions can be positively (and switching be

negatively) influenced by the enjoyment of the service relationship without necessarily needing to build up a long-term relationship commitment.

H4: The customer's intrinsic relational motivation has a positive impact on

(a) his or her affective commitment;
(b) his or her future loyalty intentions; and a negative impact on
(c) his or her likeliness to switch.

H5: The customer's affective commitment has

(a) a positive impact on his or her future loyalty intentions;
(b) a negative impact on his or her likeliness to switch.

Extrinsic relational motivation is expected to have a positive influence on the customer's future loyalty intentions and a negative impact on his or her likeliness to switch, again both directly and through the customer's calculative commitment. Calculative commitment (Geyskens et al. 1996; Verhoef et al. 2002; Gustafsson et al. 2005) can be considered as a closely related concept to extrinsic motivation as both concepts focus on a cognitive weighing up of economic benefits and costs associated with a service relationship by the consumer rather than on the potential pleasures expected of that relationship. When a consumer's participation in a relationship is motivated by the extrinsic incentives offered by the service provider, these incentives constitute economic reasons to stay in the relationship, i.e., building calculative commitment, which itself has been found to reduce switching and to increase loyalty (Wetzels et al. 1998; Gustafsson et al. 2005).

As with the case of affective commitment, instead of modeling calculative commitment as a full mediator of the motivation–behavior relation, we argue that the consumer's extrinsic relational motivation can also influence switching and future loyalty intentions directly, that is, without the strategic weighing-up process embodied in the formation of calculative commitment.

H6: The customer's extrinsic relational motivation has a positive impact on

(a) his or her calculative commitment;
(b) his or her future loyalty intentions; and a negative impact
(c) his or her likeliness to switch.

H7: The customer's calculative commitment has

(a) a positive impact on his or her future loyalty intentions;
(b) a negative impact on his or her likeliness to switch.

3 Testing the self-determination model

Our hypotheses were tested with an experimental design, which resembled those usually used in psychologist self-determination research. In a typical psychologist study on self-determination, ''participants are presented with an

interesting task (e.g., puzzle) and are rewarded. [...] Participants in a control condition engage in the activity without receiving an award'' (Cameron et al. 2001, p. 3). To adequately cover the long-term nature of service relationships, a role-playing design was developed for this research.

3.1 Methodology

3.1.1 Dramaturgy

Role-playing represents a well-established technique for learning about psychological phenomena (Surprenant and Solomon 1987; Barsade 2002; Gurhan-Canli and Batra 2004; Lee and Labroo 2004). In this study, participants were requested to assume the role of restaurant visitors and were then guided through a number of hypothetical service encounters as part of an online questionnaire. Participants were first given a detailed description of the fictitious full-service restaurant ''La Trattoria'' and told that they are regular visitors (Fig. 2). The participants were also told that their visits are stimulated by their enjoyment of the restaurant's atmosphere and its personnel (i.e., intrinsically motivating factors) rather than by cost–benefit considerations to assure a high level of pre-manipulation intrinsic relational motivation.

Participants were then asked to describe their personal relationship with the restaurant ''La Trattoria'' based on the information provided by grading scales for self-determination, extrinsic and intrinsic relational motivation, affective and calculative commitment, and future loyalty intentions. Next, participants were randomly assigned to one out of five groups (four experimental groups and the control group). The conditions for the experimental

Fig. 2 Initial description of service provider and customer–restaurant relationship

groups differed with regard to the reward offered and the extent of control. Experimental groups 1 and 3 were offered a free meal to the value of $12 after 10 restaurant visits, and groups 2 and 4 were offered an instant price break of 10%. In addition, groups 3 and 4 were required to eat at the restaurant once a month to qualify for the bonus offered (i.e., increased control), while for groups 1 and 2 no such additional condition existed (i.e., normal control). The multi-group design was preferred over a single-experimental group design as it allowed us to test the stability of results across different reward types.

Participants of the experimental groups were informed by the restaurant personnel at the end of their next ''visit'' of the introduction of an economic bonus program and its specific conditions. Experimental group participants were handed over a customer card that they were required to ''show'' to the restaurant crew at each visit when making use of the advantages offered. For the control group, participants also visited the restaurant, but were offered no such program. All participants were then guided through descriptions of four additional visits of the restaurant, covering a fictitious period of 6 months. These additional visit scenarios all described concrete events (e.g., visit from a former schoolmate, going out with a small group of friends) and were identical for all groups except for the use of the customer card at the end of each service encounter, which was exclusive to experimental groups participants. After being guided through the four restaurant visits, the respondents were again asked to rate their relationship with ''La Trattoria'' in terms of self-determination, extrinsic and intrinsic relational motivation, and affective and calculative commitment.

Participants were then told that a new Italian restaurant had opened in the direct neighborhood of ''La Trattoria''. The new restaurant was described as being equal to the ''La Trattoria'' in terms of food quality, atmosphere, and personal service (the participant was told that he or she had received that information from close friends as well as the local newspaper). The only difference between the new restaurant and ''La Trattoria'' was that prices for both food and drinks were 25% lower at the new restaurant. Based on that information, participants were asked about their future loyalty intentions with ''La Trattoria'' and which of the two restaurants they would predominantly visit from now on.

3.1.2 Sample

A total of 3,000 consumers were invited to participate in the experiment via email by an internationally operating marketing research company, using age and gender as quota criteria. 1,078 consumers filled out the questionnaire. Two hundred and thirty four of which were excluded based on either missing data or too short (i.e., less than 9 min) or too long (i.e., more than 60 min) response time, and an additional 76 cases were expelled due to an insufficient level of pre-manipulation intrinsic motivation (i.e., composite mean of four or below on a seven-point scale). This procedure resulted in a final sample size of

768 (response rate = 25.6%) and corresponding group sample sizes between 151 and 157 (Table 1).

3.1.3 External validity

Participants were asked to rate the level of realism of the scenarios. The average score was 5.0 out of 7 (with 1 = not realistic at all and 7 = absolutely realistic) and the median was also 5.0, with only 2.9% of the respondents perceiving the scenarios as not realistic. We measured the attractiveness of the bonus programs with three items (i.e., ''the bonus offer is valuable to me'', ''the bonus offer meets my needs'', and ''the bonus offer is of high value for me''; $\alpha = 0.89$; Yi and Jeon 2003) and found them to be adequately attractive for participants, with a mean composite score of 4.20 for the overall sample and mean values of 4.42 for both types of discount offers (normal and increased control), 4.14 for the free meal offer with normal control, and 3.77 for the free meal offer with increased control, respectively. Finally, none of the respondents did not eat out regularly at a restaurant in real life. Altogether, these results provide support for the validity of our experimental study design.

Table 1 Sample characteristics

Group	EG 1	EG 2	EG 3	EG 4	CG	Total sample
Percentage of total sample	19.7	20.3	20.1	19.7	20.1	100.0
Number of cases	151	155	154	151	157	768
Age						
<20 years	4.6	5.8	3.9	6.7	2.5	4.7
20–29 years	16.6	14.8	21.4	22.6	21.7	19.4
30–39 years	19.9	25.8	30.5	23.4	28.0	25.6
40–49 years	21.8	29.7	14.3	14.6	20.4	20.2
50–59 years	17.9	12.3	13.7	18.0	17.8	15.9
>=60 years	19.2	11.6	16.2	14.7	9.6	14.2
Gender						
Male	46.7	44.8	55.6	44.7	54.1	47.4
Female	53.3	55.2	44.4	55.3	54.9	52.6
Education						
Not graduated from school	1.4	1.9	1.3	0.0	0.0	0.9
Lower secondary school	15.5	14.2	9.8	10.0	10.3	11.9
Intermediate secondary school	30.4	32.9	36.6	33.3	28.2	32.3
A-levels	30.4	25.8	31.4	31.4	37.1	31.3
University degree	22.3	25.2	20.9	25.3	24.4	23.6
Income						
Less than $1,200	25.7	27.7	20.5	28.0	25.7	25.5
$1,200 to $1,800	25.7	20.9	24.7	26.6	20.8	23.7
$1,800 to $2,400	16.0	18.2	21.9	16.8	25.0	19.6
$2,400 to $3,000	12.5	10.8	16.4	9.1	10.4	11.9
$3,000 to $3,600	8.3	12.2	7.5	7.7	7.6	8.7
$3,600 and above	11.8	10.1	8.9	11.9	10.4	10.6

Note All numbers are percentages. *EG* experimental group; *CG* control group

3.1.4 Scales and reliability analysis

Established scales were used to measure the model construct when available. Specifically, intrinsic relational motivation and self-determination were measured with four items each from Deci and Ryan's (2005) Intrinsic Motivation Inventory (see also Ryan 1982) and Unger and Kernan's (1983) perceived choice scale. As the items for self-determination are negatively worded, an inverted scale is used when reporting the results to increase readability. Extrinsic relational motivation was measured with five items from Amabile et al. (1994). In all cases, items had to be reworded to fit into the customer–service relationship context of this research. Affective commitment and future loyalty intentions were measured with four and three items each from Jones and Taylor (2004) and Jones et al. (2000), respectively. As available measures for calculative commitment are not limited to economic reasons, but also include other kinds of calculative commitment (such as lack of alternatives, contracts, and convenience; Kumar et al. 1995; Geyskens et al. 1996), we adapted one item from Kumar et al. (1995) that measures economic reward-based calculative commitment and developed three additional items to adequately capture the economic nature of the incentives offered. The reliability of all model construct measures was satisfactory with alpha scores for the post-intervention scales between 0.83 and 0.97. Descriptive scale statistics and correlations are provided in Table 2.

4 Results and discussion

Our hypotheses were tested with ANOVA and partial least square structural equation modeling (PLS). ANOVA was applied to those hypotheses that deal with the impact of bonus programs on inner-consumer states (i.e., self-determination, H1; extrinsic relational motivation, H3). Hypotheses which did not involve the direct effects of economic bonus programs, but address relationships among two latent variables, were tested simultaneously via partial least squares structural equation modeling (PLS).

On the aggregate level, the ANOVA tests provide strong support for both H1 and H3 (see Fig. 3). Specifically, the level of post-intervention self-

Table 2 Descriptive scale statistics and correlations

	No. of items	Mean	SD	(1)	(2)	(3)	(4)	(5)	(6)
Intrinsic relational motivation	4	6.25	0.94	0.930	0.027	0.131$^{\#}$	0.491$^{\#}$	0.000	0.343$^{\#}$
Extrinsic relational motivation	5	3.27	1.94		0.967	–0.287$^{\#}$	0.123$^{\#}$	0.767$^{\#}$	–0.195$^{\#}$
Self-determination*	4	5.54	0.87			0.828	–0.022	–0.426$^{\#}$	0.205$^{\#}$
Affective commitment	4	5.16	1.49				0.926	0.171$^{\#}$	0.268$^{\#}$
Calculative commitment	4	2.62	1.78					0.947	–0.206$^{\#}$
Future loyalty intentions	3	5.42	1.61						0.790

Note Numbers refer to post-intervention scores; values in the diagonal are Cronbach's αs. *SD* standard deviation

* All values for self-determination are reversed to increase readability. $^{\#}p < 0.01$

determination (PISD) is higher for the control group ($\bar{x}_{\text{PISD}} = 6.74$) than for the experimental groups aggregate ($\bar{x}_{\text{PISD}} = 6.49$), with differences being highly significant ($F = 11.01$, $p < 0.001$). Also, post-intervention extrinsic relational motivation (PIEM) is higher for members of the experimental groups ($\bar{x}_{\text{PIEM}} = 3.66$) than for those participants who had not been offered a bonus program incentive ($\bar{x}_{\text{PIEM}} = 1.78$). Differences are again clearly significant ($F = 136.77$, $p < 0.001$).

Results remain the same when individual experimental groups are compared with the control group. For PIEM, values are significantly higher for each of the four experimental groups when compared to the control group, with $p < 0.001$

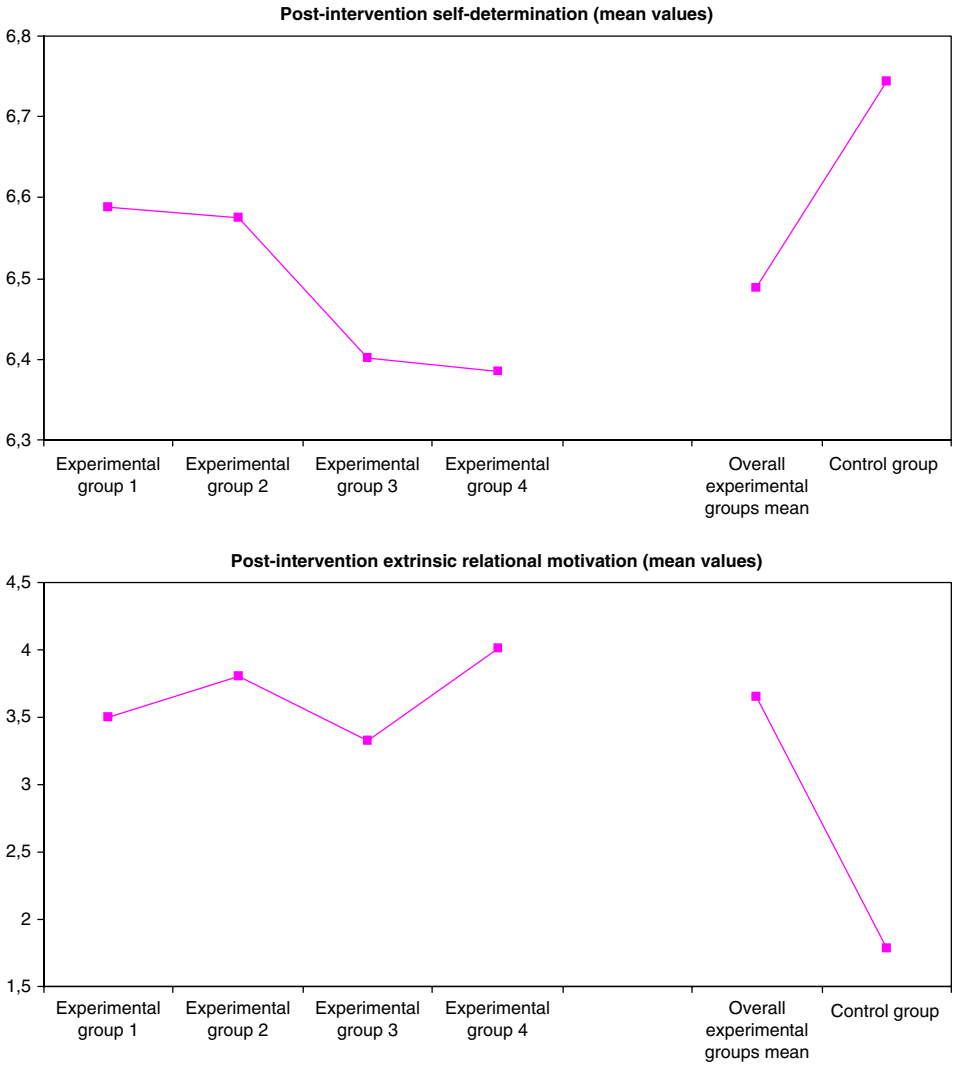

Fig. 3 ANOVA results for self-determination and extrinsic relational motivation

in all cases. With regard to PISD, scores are also significantly lower for all four experimental groups ($p_{EG1} = 0.07$; $p_{EG2} = 0.04$; $p_{EG3} < 0.001$; $p_{EG4} < 0.001$). Overall, we believe that these results provide strong support for H1 and H3.

All other supplementary hypotheses were tested with PLS, which allowed us to include the dichotomous switching variable as a model outcome (Fornell and Bookstein 1982) and, as a component-based and distribution-free method, has fewer constraints and statistical specifications than covariance-based techniques such as LISREL. Chin's (2001) PLS Graph software (Version 3.0) was used to estimate the model paths, with the inner weightings being estimated via the path method and *t* values generated via bootstrapping.

Except for switching which was coded 0 for switching and 1 for staying with the service provider, all constructs were measured using the reflective multi-item scales described above. All outer model loadings are above 0.85 except for one future loyalty intention item and one self-determination item, which had coefficients of 0.58 and 0.63, respectively. Composite reliability is above 0.85 for all constructs, and the average variance extracted is above 0.70 for all variables of the model (see Appendix). PLS path coefficients are reported in Table 3.

The PLS results provide general support for the model's affective pathway. Specifically, self-determination is shown to exert a positive impact on intrinsic relational motivation (supporting H2), with the latter significantly influencing affective commitment (positive; supporting H4a) as well as future loyalty intentions (positive; supporting H4b) and switching (negative; supporting H4c), all in the proposed direction. Furthermore, affective commitment is found to have a positive impact on consumers' future loyalty intentions (supporting H5a). Although the path coefficient from affective commitment to switching is in the expected direction (i.e., negative), the path is somewhat small and non-significant, providing only partial support for H5b.

Table 3 Path coefficients from partial least squares analysis

Hypothesis	Impact of	On	Path coefficient	*t* value	Hypothesis supported?
H2	Self-determination	Intrinsic relational motivation	0.168	3.334	+
H4a	Intrinsic relational motivation	Affective commitment	0.493	12.097	+
H4b	Intrinsic relational motivation	Future loyalty intentions	0.282	5.015	+
H4c	Intrinsic relational motivation	Switching behavior	–0.179	3.467	+
H5a	Affective commitment	Future loyalty intentions	0.210	3.836	+
H5b	Affective commitment	Switching behavior	*–0.058*	1.171	–
H6a	Extrinsic relational motivation	Calculative commitment	0.767	29.746	+
H6b	Extrinsic relational motivation	Future loyalty intentions	–0.122	1.750	–
H6c	Extrinsic relational motivation	Switching behavior	*0.071*	0.965	–
H7a	Calculative commitment	Future loyalty intentions	–0.126	1.722	–
H7b	Calculative commitment	Switching behavior	*0.071*	0.940	–

Note Path coefficients printed in italics are non-significant at $p < 0.05$

Looking at the model's cognitive pathway, we find that extrinsic relational motivation strengthens customers' calculative commitment, as suggested in H6a. However, the hypotheses proposing a positive impact of extrinsic relational motivation and calculative commitment on future loyalty intentions and a negative impact on switching are *not* supported by the data. Instead, we find both constructs being significantly negatively correlated with customers' future loyalty intentions. In other words, the higher a customer's extrinsic relational motivation and calculative commitment, the lesser this customer's loyalty towards a service provider will be, which forces us to reject H6b and H7b. Consistent with this finding, both extrinsic relational motivation and calculative commitment are found to be *positively* associated with the consumers' tendency to switch to an alternative service provider. Even though these associations are not statistically significant, H6c and H7c are not supported.

Summarizing the ANOVA and PLS results, we find that the offer of economic bonus programs can have a negative impact on customer loyalty through two different pathways. First, economic bonus programs can reduce customers' self-determination, which then negatively influences customers' intrinsic motivation to stay in the relationship and, accordingly, their affective commitment towards the relationship. This effect is in line with Dholakia's (2006) interpretation of his results. Second, our findings suggest that economic bonus programs can also deteriorate service relationships by increasing the level of customers' extrinsic relational motivation. In detail, the results suggest that, under the conditions of our experimental setting, economic bonus programs stir customers' extrinsic relational motivation, which then negatively impacts future loyalty intentions both directly and through an increased level of calculative commitment. Like the related concept of extrinsic relational motivation, a high level of calculative commitment is found to threaten customer loyalty intentions, a finding that might carry important lessons for service firms. Given the counter-intuitive nature of these findings, it is interesting to see that other scholars had previously raised questions about the loyalty enhancing impact of cognitive relationship determinants. Specifically, Hennig-Thurau et al. (2002) reported that a high level of economic benefits gained from a service relationship is negatively associated with customers' loyalty intentions.

5 Implications for marketing theory and management

This paper provides empirical evidence that economic bonus programs targeted at increasing customers' loyalty with a firm can lead to counter-productive results, i.e., decreasing customer loyalty instead of improving it when the program is perceived as controlling by the customers. We demonstrate that economic bonus programs can jeopardize loyalty in two different ways. First, economic bonus programs are shown to undermine customers' intrinsic relational motivation by reducing the customers' level of self-determination which eventually leads to lower future loyalty intentions and higher switching rates. Second, economic bonus programs are found to influence loyalty

intentions by increasing the customers' level of extrinsic relational motivation and calculative commitment, which are both shown to exert a negative effect on loyalty intentions and a positive impact on switching. These findings support the suggestions made by Dholakia (2006) and can help to explain the results of previous studies on bonus programs which had not found bonus programs to positively affect service relationship outcomes (e.g., Sharp and Sharp 1997; Wright and Sparks 1999; McIllroy and Barnett 2000; Roehm et al. 2002). Given the wide spread use of economic bonus programs across service industries, these findings also provide important messages for both marketing scholars and service managers.

As our results show that customers relational motivation is relevant for service relationships, a key implication for marketing theory is the necessity to extend our understanding of the conditions under which this ''undermining effect'' of controlling bonus programs takes place. The findings of this study that refer to the affective pathway of our model are mainly applicable to such consumer–service firm relationships which are characterized by a high level of intrinsic relational motivation on the side of the customer, as this intrinsic motivation is a premise of the undermining effect of controlling bonus programs. As the concept of relational motivation has only rarely been studied before in the context of consumer–firm relationships (exceptions are Kivetz 2003, 2005; Dholakia 2006), we see a need to better understand in which service industries customers have a high level of intrinsic relational motivation and what minimum level of intrinsic motivation is needed for the undermining effect to take place.

Also, it is necessary to extend marketing knowledge on the effect different kinds of bonus programs have on the existence and strength of the undermining effect. In our empirical study, we tested different variations of two kinds of widely used economic bonuses, namely, an instant price break and the offer of a free service after a fixed number of service transactions. Although the strength of the undermining effect differs to a certain extent between the various bonus programs, no systematic variation seems to be present. Future studies should therefore shed additional light on the role of bonus program characteristics, deepening our understanding of price breaks versus free additional services as well as extending our knowledge by considering other kinds of bonus programs than those used in this study.

Moreover, our results stress the ambivalent role that cognitively dominated constructs such as extrinsic relational motivation and calculative commitment play within the relationship marketing concept. While commitment has been a heavily researched topic, existing studies predominantly address emotional aspects of consumer commitment, while work on calculative commitment in the consumer context has remained rare. Our results show that such cognitive concepts can have a destructive effect on service relationships, something that definitely deserves more attention from marketing scholars, particularly as a large number of existent bonus programs focus on building cognitive rather than emotional switching barriers. Our study differs from others, which have found calculative commitment to exert a positive influence in at least three regards. First, we use a measure, which captures the core of the construct, i.e.,

it includes only economic reasons and leaves out other constraints such as convenience and lack of alternatives (Kumar et al. 1995; Geyskens et al. 1996). Second, the study by Gustafsson et al. (2005) is set in the telecommunications industry where customers are usually tied to providers through long-term contracts while in our setting consumers could choose freely between providers on an encounter-by-encounter basis. Third, we measure switching and future loyalty intentions against the existence of a competitor. That said, we find it interesting to note that other authors have also raised questions about the impact of cognitive barriers on relational outcomes. For example, Verhoef et al. (2002) found a negative (although non-significant) effect of calculative commitment on customer referrals and number of services purchased and both Bansal et al. (2004) and Gruen et al. (2000) found the link from the related concept of continuance commitment to customers' switching intentions and retention, respectively, to be non-significant.

For marketing managers, the major implication of this study is that budgets assigned to economic bonus programs should be carefully reconsidered. In particular, service firms which offer services which consumers do not use as a means to other goals, but rather enjoy using them per se (e.g., amusement parks, movie theaters), should be aware of the potentially destructive nature of economic bonus programs. Our findings suggest that reallocating budgets from bonus programs to other customer-orientation measures might increase marketing effectiveness. More specifically, service firms should test whether their existent or planned bonus programs deteriorate customers' perception of self-determination and, if so, develop appropriate instruments.

A finding of similar relevance is that our results suggest that ''cold'' switching barriers, such as contracts and monetary switching costs, negatively influence the maintenance of long-term relationships with service customers. While the role of self-determination is restricted to relationships fueled by a high intrinsic motivation, the negative impact of extrinsic motivation and calculative commitment should not be limited to a certain type of service or relational motivation. Although our study's findings on this effect are somewhat exploratory, managers should carefully consider offering measures that strengthen the creation of emotional bonds instead of bonus programs that focus solely on ''cold'' switching barriers.

As with any other study, some limitations exist. Although we use four different kinds of bonuses in our experimental setting and have collected a large representative quota sample for hypothesis testing, the study design does not provide empirical results for other services and other kinds of bonus programs. We must also concede that, when making general judgments on the efficiency of economic bonus programs, our findings cover only those effects of bonus programs, which affect relational customers, i.e., customers which already are in a relationship with the firm. It has been argued that bonus programs can also increase a company's market share by attracting *new* customers, a fact which might add to the economic attractiveness of loyalty programs (Shugan 2005). However, managers should not expect too much from this, as findings of Sharp and Sharp (1997) indicate that the long-term effects of loyalty programs are

strictly limited in size. Finally, previous studies on the effectiveness of bonus programs have highlighted the role of other variables such as perceived customer effort and length of reward delay period (Kivetz 2003). Although this research pursues different goals, it would be interesting to see how and to what extent these variables influence the effects reported here.

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6 Appendix

Table 4

Table 4 List of items and goodness-of-fit measures of partial least squares analysis

Self-determination (Composite reliability = 0.907, AVE = 0.714)	
I am a regular customer of "La Trattoria" because I feel obligated.	0.630
I am a regular customer of "La Trattoria" because I have no choice.	0.896
I am a regular customer of "La Trattoria" because I have to.	0.915
I am a regular customer of "La Trattoria" because I feel forced.	0.906
Intrinsic relational motivation (Composite reliability = 0.956, AVE = 0.844)	
I enjoy being a guest at "La Trattoria".	0.922
Being at "La Trattoria" is fun.	0.943
I think being a guest at "La Trattoria" is quite enjoyable.	0.948
While I am at "La Trattoria", I am thinking about how much I enjoy it.	0.859
Extrinsic relational motivation (Composite reliability = 0.974, AVE = 0.884)	
I am often at "La Trattoria" because as a loyal customer I pay less.	0.938
I go to "La Trattoria" because loyal customers receive an economic advantage.	0.904
I visit "La Trattoria" because as a loyal customer I can save money compared to other customers.	0.963
I am a loyal customer of "La Trattoria" because my repeated patronage is rewarded by lower prices.	0.937
I am strongly motivated by the money I can save as a regular customer of "La Trattoria".	0.957
Affective commitment (Composite reliability = 0.948, AVE = 0.820)	
"La Trattoria" has a great deal of personal meaning to me.	0.897
I feel "emotionally attached" to "La Trattoria".	0.924
I feel a strong sense of belonging to "La Trattoria".	0.887
My relationship to "La Trattoria" is something I really care about.	0.915
Calculative commitment (Composite reliability = 0.962, AVE = 0.862)	
It would be too expensive for me to terminate my relationship to "La Trattoria".	0.932
Elsewhere I do not receive a bonus for repeated patronage.	0.927
If I switch I would loose the price reductions for loyal customers.	0.952
Switching to another restaurant would be an economic disadvantage.	0.903
Future loyalty intentions (Composite reliability = 0.875, AVE = 0.709)	
It is likely that I will remain in the relationship to "La Trattoria".	0.944
The relationship to "La Trattoria" will likely persist for a long time.	0.947
I intend to end the relationship to "La Trattoria" in the near future.	0.582

Note Numbers in the right-hand column are coefficients of determination (outer model loadings) for the aggregated model. *AVE* average variance extracted

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