

**INSTITUTE FOR SOCIAL AND ECONOMIC RESEARCH AND POLICY  
COLUMBIA UNIVERSITY  
WORKING PAPERS**

**THE ROLE OF EFFORT ADVANTAGE IN CONSUMER RESPONSE TO LOYALTY  
PROGRAMS: THE IDIOSYNCRATIC FIT HEURISTIC**

**Ran Kivetz  
Graduate School of Business  
Columbia University**

**Itamar Simonson  
Graduate School of Business  
Stanford University**

**December 2002**

**ISERP WORKING PAPER 02-08**

**ISERP**  
Institute for Social and Economic Research and Policy

---

Under Second Review, *Journal of Marketing Research*

Ran Kivetz is Assistant Professor of Marketing, Graduate School of Business, Columbia University, 3022 Broadway, NY, NY 10027 (rk566@columbia.edu). Itamar Simonson is the Sebastian S. Kresge Professor of Marketing, Graduate School of Business, Stanford University, 518 Memorial Way, Stanford, CA 94305 (simonson\_itamar@gsb.stanford.edu). The authors are grateful for helpful comments and suggestions received from Yifat Kivetz, Joan Meyers-Levy, Lee Ross, V. “Seenu” Srinivasan, Z. John Zhang, and JMR Editor and reviewers. This research was supported in part by a research grant from the Institute for Social and Economic Research and Policy.

## ABSTRACT

Over the past few years, customer relationship management and loyalty programs (LPs) have been widely adopted by companies and have received a great deal of attention from marketers, consultants, and, to a lesser degree, academics. In this research, we examine the effect of the level of effort required to obtain a LP's reward on consumers' perception of the LP's attractiveness. We propose that, under certain conditions, increasing the program requirements can enhance consumers' likelihood of joining the program, thus leading consumers to prefer a dominated option. Specifically, we hypothesize that consumers often evaluate LPs based on their individual effort to obtain the reward relative to the relevant reference effort (e.g., the effort of typical other consumers). When consumers believe they have an effort advantage relative to typical others (i.e., an *idiosyncratic fit* with the LP), higher program requirements magnify this perception of advantage and can therefore increase the overall perceived value of the program. This proposition was supported in a series of studies in which the perceived idiosyncratic fit was manipulated either by reducing the individual effort or by raising the reference effort. The findings also indicate that (a) idiosyncratic fit considerations are elicited spontaneously, (b) idiosyncratic fit mediates the effect of effort on consumer response to LPs, and (c) an alternative account for the results based on signaling is not supported. We conclude that these findings are part of a broader phenomenon, which we term the idiosyncratic fit heuristic, whereby a key factor that affects consumers' response to marketing programs and promotional offers is the perceived relative advantage or fit with the individual's idiosyncratic conditions and preferences.

Over the past few years, loyalty (or frequency) programs have become a key component of customer relationship management (CRM), serving a critical role in developing relationships, stimulating product and service usage, and retaining customers. Marketers have implemented such programs in a wide variety of industries (Blattberg and Deighton 1996; Deighton 2000; Drèze and Hoch 1998; Sausner 2001; Shoemaker and Lewis 1999), and over half of the American (adult) population currently participates in at least one loyalty program (LaPointe 2002). Further, the importance of loyalty programs has been recognized in the managerial and economic modeling literatures (e.g., Borenstein 1996; Kim, Shi, and Srinivasan 2001; Kopalle and Neslin 2000). Nevertheless, we still know very little about the factors that influence customer perception of, and response to, such programs and why some programs are highly successful (e.g., frequent flyer programs) whereas other programs fail (e.g., Internet network loyalty programs). Thus, one goal of the present research is to improve our understanding of consumer preference toward loyalty programs and, more generally, toward streams of efforts that lead to future rewards (e.g., conducting research to achieve tenure and dieting to lose weight).

Loyalty programs (hereafter, LPs) also raise important theoretical questions relating to such issues as the characteristics of the required efforts, the obtained rewards, the decision to join the program, and the factors influencing the likelihood of reaching the reward. Recent research has begun to address these questions, and in particular, the relationship between the required effort and the preference toward LP rewards. For instance, Kivetz and Simonson (2002a) showed that consumers use the required program effort to justify their choices between luxury and necessity rewards, and Hsee, Yu, and Zhang (2002) demonstrated that a program's currency (e.g., points or miles) can mask an undesirable effort-reward relationship. Although this research has improved our understanding of the relation between the level of effort and consumers' reward preferences (see also van Osselaer and Alba 2002), the more basic question of how the level of effort affects the attractiveness of a LP has not yet been studied.

In this research, we investigate the effect of the level of required effort on customer preference for loyalty programs. Contrary to the common assumption, we suggest that higher

effort requirements can enhance the perceived value of loyalty programs. Furthermore, we propose a general principle of consumer behavior, which we call the “idiosyncratic fit heuristic,” whereby consumers are enticed by offers in which they enjoy a relative advantage. For example, when consumers perceive their own effort in complying with the program requirements as lower than the efforts of typical other consumers, they construe the LP as providing an idiosyncratic fit and, therefore, as a better deal for them. Like other rules of thumb, the idiosyncratic fit heuristic is often useful and consistent with value maximization, but it can lead to errors and selections of inferior options. In particular, we show that, under high perceived idiosyncratic fit, consumers may be more likely to join a LP with greater effort requirements than one that offers the same reward with lower effort.

We begin by presenting the concept of idiosyncratic fit and discussing its role in shaping consumer preference and accounting for the results of prior research. Next, we consider the implications of idiosyncratic fit for consumer response to LPs, leading to the idiosyncratic fit hypothesis. This hypothesis as well as other predictions were tested in a series of studies, with a total of approximately 2300 consumers. We also examined the mechanism underlying the impact of idiosyncratic fit as well as alternative explanations for the results. The theoretical and practical implications of this research are discussed in the final section.

## **THE ROLE OF IDIOSYNCRATIC FIT IN CONSUMER PREFERENCE**

A great deal of research has shown that consumer preferences are often unstable and ill-defined, and that consumers construct their evaluations and preferences when faced with the need to make a decision (for a review, see Bettman, Luce, and Payne 1998; Payne, Bettman, and Johnson 1992). Other studies further demonstrated the difficulty of assessing individual options and outcomes (e.g., Bazerman, Loewenstein, and White 1992; Hsee 1996; Nowlis and Simonson 1997). Assessing the value of an individual option or a marketing offer is particularly

challenging when consumers do not have readily available reference points, such as similar, previously encountered options or offers (e.g., Kahneman, Ritov, and Schkade 1999).

How, then, do consumers handle the task of evaluating individual offers or options presented to them? Prior research suggests that consumers seek cues that serve as proxies for the offer's attractiveness or value for them. For example, even if a consumer has no prior information about the normal or reasonable prices in a certain category, the fact that an item is on "sale" for 50% off the regular price can be used as a cue that the price is attractive (e.g., Thaler 1985; Winer 1986).

Relatedly, we argue that consumers often assess alternatives and marketing promotions based on their idiosyncratic fit with the offer; that is, they tend to place significant weight on whether the offer provides a better "fit" for them than for others. If a consumer believes that she has an especially good fit with an alternative (e.g., she thinks that a certain aspect of the offer is especially valuable to her but not to others), and given the reasonable assumption that existing offers in the marketplace are perceived as attractive by most consumers, then the consumer may conclude that this alternative is particularly attractive for her. In other words, idiosyncratic fit indicates that the consumer has a relative advantage with respect to that option, which is often, though not always, an indicator of an attractive opportunity (see also Schindler 1989, 1998; Thaler 1985, 1999).

The reliance on such an idiosyncratic fit heuristic is consistent with social comparison theory (Festinger 1954), which explicitly postulates a human drive to evaluate one's abilities, outcomes, and preferences. Since such evaluations often cannot be established on the basis of objective criteria, people may rely instead on comparisons with the typical abilities, outcomes, and preferences of others. The notion that consumers will spontaneously compare themselves to typical others is also supported in research on mental simulations and counterfactuals (e.g., Kahneman and Miller 1986; Sanna 1996). This research has shown that people often voluntarily form comparisons relative to various simulated or mental representations that do not exist in reality.

The idiosyncratic fit heuristic can account for the results of prior research (e.g., Simonson, Carmon, and O'Curry 1994; Simonson, Nowlis, and Simonson 1993), whereby consumers avoid options simply because they fit others better or because they include features that the consumer can do without. For example, the finding that a consumer tends to prefer [reject] options that are rejected [preferred] by other consumers for reasons that do not apply to that consumer (Simonson et al. 1993) can be interpreted as suggesting that consumers assess their idiosyncratic fit with options and offers based on whether the reasons employed by others for selecting or rejecting these options are relevant to them. Next, we consider the implications of idiosyncratic fit for consumer response to LPs, leading to a series of direct tests of this heuristic.

## **THE IMPACT OF PERCEIVED IDIOSYNCRATIC FIT ON PREFERENCE FOR LOYALTY PROGRAMS**

When evaluating the attractiveness of a LP there are two main components that consumers are likely to consider: the required effort and the rewards that can be earned (e.g., see also Drèze and Hoch 1998; Hsee et al. 2002; Kivetz and Simonson 2002a; Soman 1998). In many cases, the required efforts are extended over time, and rewards are contingent on reaching a certain requirement level (e.g., the amount of required points, frequent flyer miles, or purchases before reward attainment). Perceived (program) effort is defined here as any inconvenience inherent in complying with the program requirements, such as making a special effort to buy at a particular store or purchasing more than the consumer would have otherwise bought.<sup>1</sup>

Since most consumers do not have expertise in assessing the efforts and rewards associated with participating in a LP, they are likely to rely on cues, just as consumers use various quality and value cues. In particular, we propose that consumers often determine the value of a program for them based on whether or not it provides a better fit for them than for

---

<sup>1</sup> Perceived effort also includes substitution costs, that is, the disutility that consumers incur by purchasing a particular brand that they would not have otherwise bought (Blattberg and Neslin 1990).

others. Thus, when consumers perceive their individual effort as low relative to a relevant reference effort (e.g., the effort of most other consumers), they may construe the program as providing them with an idiosyncratic fit. Of course, consumers generally prefer larger absolute rewards and lower absolute efforts. However, most loyalty programs cannot be easily compared with other programs, in part because marketers often make such comparisons difficult to perform; for instance, marketers offer different rewards or use different dollar-to-point conversion rates (e.g., “1 point for every \$10 spent” versus “10 points for every \$1 spent”). Other programs are difficult to compare because they are structured very differently from each other; for instance, some hotel LPs denominate efforts in terms of required stays, whereas other programs use dollars spent. Furthermore, evaluating the attractiveness of loyalty programs is not something in which most consumers have a great deal of expertise. Consequently, making judgments about LPs on the basis of the absolute required effort and the obtained reward is often a challenging task.

Conversely, assessing idiosyncratic fit is often much easier. Consider, for example, a gas station that offers a loyalty program, where consumers can earn a car vacuum cleaner after they make twenty gas purchases at the station. A consumer who happens to live very close to this particular gas station and purchases gas at this station frequently is likely to recognize that his/her idiosyncratic effort in complying with the program requirements is lower than the typical effort of most other consumers who might participate in that program. Such a consumer may then make the attribution that, if the program requirements and offerings are reasonable for others, they are especially favorable for him/her; that is, the consumer enjoys an idiosyncratic fit with respect to that program.

We argue that although considering idiosyncratic fit when evaluating LPs may often be a reasonable strategy, over-relying on this heuristic can lead to biases and sub-optimal decisions. In particular, consumers who rely heavily on the idiosyncratic fit heuristic may prefer a dominated LP that requires greater effort for the same reward. That is, contrary to the common assumption, higher effort requirements can enhance the likelihood of joining a LP when consumers perceive themselves as having an idiosyncratic fit with this program.



This prediction is illustrated in Figure 1. The perceived reference effort (e.g., the effort required by typical others or the effort required by another related LP) and the perceived individual effort are both increasing functions of the objective (stated) program requirements.<sup>2</sup> The perception of idiosyncratic fit, which results from individuals construing their individual effort as lower than the reference effort, is represented using the vertical solid lines between the reference effort line and a (lower) individual effort line. For example, in the left-hand side of Figure 1, a consumer with a relatively flat (low) individual effort function has an effort advantage relative to the (steeper) reference effort function. This consumer perceives the LP as providing her with an idiosyncratic fit.

Moreover, in such a case, the perceived idiosyncratic fit (i.e., the gap between reference and individual effort) increases with greater program requirements. For instance, if a consumer believes that it is easier for her to make ten gasoline purchases at a particular station (e.g., because she lives next to that station), then she will perceive her effort advantage as greater when twenty gasoline purchases are required instead of ten. To use a more extreme example, if just one purchase is required to obtain the reward, then the significance of any idiosyncratic fit is limited, because any consumer can make a one-time effort. However, as the level of program requirements increases, the relative advantage of the consumer with idiosyncratic fit “adds up.” Considering that evaluating LPs on the basis of the absolute required effort is typically very difficult, this increase in the relative advantage can enhance the overall perceived value of the program.

By contrast, when the individual effort function is steeper (higher) than the reference effort function, the consumer will construe the program as providing an idiosyncratic *misfit* (represented with broken vertical lines). This perception of misfit will increase with greater program requirements. Thus, in this case, both the individual effort and the perceived idiosyncratic misfit will work in the same direction, whereby increasing the program requirements detracts from the program’s attractiveness.

---

<sup>2</sup> The ensuing conceptualization also holds (within a reasonable empirical range) when the perception of effort is assumed to be a concave function of program requirements (i.e., diminishing sensitivity to requirements).

-----  
Insert figure 1 about here  
-----

Of course, idiosyncratic fit is not the only determinant of consumer response to LPs. In particular, to the extent that a consumer can meaningfully and confidently assess the attractiveness of a LP on the basis of the absolute values of the required effort and the reward, the need to rely on a proxy such as idiosyncratic fit diminishes. For instance, most frequent flyer programs are very similar and follow a de facto standard regarding the required effort and reward thresholds (e.g., 25,000 miles for a free roundtrip domestic ticket). Thus, consumers may be able to evaluate frequent flyer programs without relying much on idiosyncratic fit.

However, considering the difficulty of comparing most LPs (see also Hsee 1996; Nowlis and Simonson 1997) and the fact that most consumers are not experts in valuing such programs, we expect the idiosyncratic fit heuristic to play a significant role in many situations. Specifically, when consumers perceive the reference effort as higher than their own individual effort (i.e., idiosyncratic fit), increasing the program requirements (between-subjects) is expected to lead to higher perceived program value, even though the reward is held constant (i.e., a violation of dominance). Furthermore, even if the program requirements are held constant, the perceived idiosyncratic fit and, correspondingly, the LP attractiveness may be enhanced if the reference effort is raised.

These predictions, of course, do not mean that higher effort or reference effort will always enhance the attractiveness of the LP, considering that more effort has a direct negative effect on the program attractiveness (just as higher product price has a direct negative effect on the attractiveness of purchasing that product). Moreover, at very high required effort levels, a consumer may eliminate the LP from further consideration before evaluating the implications of any idiosyncratic fit. Finally, when consumers do not perceive the LP as providing an idiosyncratic fit (i.e., individual effort  $\geq$  reference effort), greater requirements will lead to a lower perceived program value.

The discussion leads to the following proposition:

Under perceived idiosyncratic fit, increasing the magnitude of the loyalty program requirements, while holding the reward constant, can enhance the likelihood of joining the program (hereafter, the idiosyncratic fit hypothesis).

Although this hypothesis focuses on likelihood of joining the program as the primary indicator of program attractiveness, one might also examine the effect of idiosyncratic fit and requirement level on consumers' willingness to pay (WTP) for membership in the program. Indeed, some existing LPs require consumers to pay a membership fee when joining the program (e.g., American Express Membership Rewards, CBS SportsLine Rewards Plus, and BLOCKBUSTER Rewards). However, because most current programs do not charge membership fees, many consumers may resist paying even a small amount to join a LP. In the subsequent tests of the idiosyncratic fit heuristic, we employ likelihood of joining as the main measure of program value and supplement it in Study 2 with a WTP membership fees measure and in Study 4 with a binary join/no join choice measure.

## **METHOD OVERVIEW**

We conducted a series of studies to test the idiosyncratic fit hypothesis as well as the predictions discussed subsequently. In these studies, the respondents were either recruited at domestic terminals of a major airport or at a large East Coast university. The airport respondents were between 18 and 80 years old and represented a wide range of demographic characteristics. A total of approximately 2,300 respondents participated in the studies. In all cases, respondents were randomly assigned to conditions.

In each study, a written introduction explained the general concept of loyalty (or frequency) programs, using the example of frequent flyer programs, and asked respondents to make choices, indicate their likelihood of joining, and/or state their WTP fees for the described LPs. The programs used in the studies were based on actual LPs available in the marketplace, such as department store, grocery store, and credit card programs. The descriptions of the relevant LPs specified the program requirements (e.g., number of purchases needed to obtain the

reward) and presented the reward/s in detail, including color photographs. The rewards were also based on real LPs, such as a prepaid phone card, a car vacuum cleaner, and a movie ticket.

The perceived idiosyncratic fit was manipulated by affecting either the individual effort or the perceived reference effort (see left- and right-hand side of Figure 1, respectively). For example, the individual effort can be varied by informing respondents that a store that offers a LP is located either far away from or close to their house. Alternatively, perceived idiosyncratic fit can be manipulated by changing the perceived reference effort. For instance, providing respondents with an ostensibly “objective,” yet actuarially over- [under-] estimated number of shopping trips typically required for most consumers to reach a particular level of spending may lead respondents to perceive their own effort as relatively low [high]. Finally, in the last study, we used consumers’ pre-existing tastes to measure rather than manipulate the perception of idiosyncratic fit or misfit. This study also elicited LP choices with real potential consequences.

## **TESTS OF THE IMPACT OF IDIOSYNCRATIC FIT ON PREFERENCES FOR LOYALTY PROGRAMS**

### Study 1: Tests of the Idiosyncratic Fit Heuristic Using Manipulations of Individual Effort

*Method.* We tested the idiosyncratic fit hypothesis by measuring respondents’ likelihood of joining two programs, involving a gas station LP (329 airport travelers) and a department store LP (354 airport travelers).<sup>3</sup> In both programs, respondents were randomly assigned to one of four conditions in a 2 (program requirements: low vs. high) x 2 (idiosyncratic fit: low vs. high) between-subjects design. In both LPs, the perceived idiosyncratic fit was manipulated by varying the individual effort.

In the gas station problem (see Figure 2a), respondents were told either that this gas station was close to their house and that they usually filled their tank there (low individual effort ⇒ high idiosyncratic fit) or that this gas station was located ten miles away from their house

---

<sup>3</sup> The two scenarios were run separately, but we include both under Study 1 because they used a similar methodology.

(high individual effort  $\Rightarrow$  low idiosyncratic fit). The level of program requirements was either ten gasoline purchases (low program requirements) or twenty gasoline purchases (high requirements). In all conditions, the reward was a car vacuum cleaner. Respondents were asked to rate the likelihood that they would join this program (relative to typical programs they are familiar with). Ratings were made on an eleven-point scale ranging from “Very Unlikely to Join” (0) to “Very Likely to Join” (10).

The manipulation of perceived idiosyncratic fit in the department store LP was similar to that used in the gas station program (see Figure 2b). The program requirements involved accumulating either \$1,500 or \$3,000 of purchases at the department store (i.e., low versus high program requirements, respectively) and the reward was a Starbucks home espresso machine. Respondents were asked to rate the likelihood that they would join this program using the same eleven-point scale.

-----  
Insert figures 2a and 2b about here  
-----

*Results.* Consistent with the idiosyncratic fit hypothesis, the results of the gas station scenario indicate that the interaction between idiosyncratic fit and program requirements in determining the likelihood of joining the program was statistically significant and in the hypothesized direction ( $F = 4.7$ ;  $df = 1$ ;  $p < .05$ ). For respondents who were told that the station was close to their house, the joining likelihood was higher for those given a program requirement of twenty versus ten gasoline purchases ( $M = 6.1$  vs.  $M = 4.7$ ,  $t = 2.5$ ;  $p < .01$ ). Further, as expected, for respondents who were told that the station was located 10 miles away from their house, the positive effect of program requirements on the likelihood of joining was eliminated ( $M = 3.1$  in the low program requirements condition vs.  $M = 2.8$  in the high program requirements condition; *n.s.*). In addition, as would be expected, greater proximity to the gas station had a significant positive main effect on the likelihood of joining ( $M = 2.9$  vs.  $M = 5.4$ ;  $F = 40.2$ ;  $df = 1$ ;  $p < .001$ ).

Similar results were obtained in the department store problem, with the statistically significant interaction between idiosyncratic fit and program requirements ( $F = 5.3$ ;  $df = 1$ ;  $p < .05$ ). When respondents were told that the store was close to their house, increasing (between-subjects) the program requirements from \$1,500 to \$3,000 of purchases led to a significantly higher mean likelihood of joining the program ( $M = 4.4$  vs.  $M = 5.4$ ;  $t = 1.8$ ;  $p < .05$ ). Further, as expected, when respondents were told that the store was located 20 miles away from their house, increasing the program requirements led to a marginally significantly lower likelihood of joining ( $M = 3.6$  vs.  $M = 2.9$ ;  $t = 1.5$ ;  $p < .1$ ). And, as would be expected, greater proximity to the store had a significant positive main effect on the likelihood of joining ( $M = 3.3$  vs.  $M = 4.9$ ;  $F = 22.9$ ;  $df = 1$ ;  $p < .001$ ).

In summary, consistent with the idiosyncratic fit hypothesis, the results indicate that, when idiosyncratic fit was high (i.e., individual effort  $\ll$  reference effort), higher program requirements enhanced the likelihood of joining the program. In addition, the positive effect of program requirements on joining likelihood was eliminated when idiosyncratic fit was low. These results support the notion that consumers employ an idiosyncratic fit heuristic when assessing loyalty programs and that such a heuristic can even lead to violations of dominance.

However, in Study 1 we tested the effect of idiosyncratic fit using a manipulation of individual effort. Although the findings were consistent with our analysis, it is not clear that respondents actually considered their relative fit with the program vis-à-vis typical others. Thus, in Studies 2 and 3 we test the idiosyncratic fit hypothesis by manipulating the reference effort while holding the individual effort constant.

### Study 2: A Test of the Idiosyncratic Fit Heuristic Using a Manipulation of Reference Effort

*Method.* In Study 2, 346 airport travelers evaluated a grocery store LP (see Figure 3); they were told that a previous study conducted at the airport revealed that it typically takes consumers eight [or four] shopping trips to a grocery store to make \$300 of purchases. The respondents were then asked to indicate how many trips to their favorite grocery store it takes

them to reach \$300 of purchases. Thus, the manipulation was intended to create the perception of idiosyncratic [mis]fit for respondents in the “typically eight [four] shopping trips” condition because, for them, it may take fewer [more] shopping trips to reach the same level of purchases (i.e., individual effort is lower [higher] than reference effort). The program requirements involved accumulating either \$900 or \$1,500 of payments at the grocery store (i.e., low versus high program requirements, respectively), and the reward was an AT&T 100 Minute prepaid calling card. There were two dependent variables: (a) a rating of the likelihood of joining the program, and (b) the highest amount of membership fees respondents were willing to pay in order to join the program.

-----  
Insert figure 3 about here  
-----

*Manipulation Check.* Unlike the explicit manipulation of individual effort used in the previous study, the manipulation employed in this study was designed to influence the perceived reference effort. Accordingly, we first examined whether the differences between the provided estimates of required trips for typical consumers (i.e., 4 or 8) and the respondents’ individual estimates were in the expected direction. On average, respondents in the high reference effort condition (“typically takes most consumers eight shopping trips to reach \$300 of payments”) indicated that it would take them 5.4 trips to accumulate \$300-worth of purchases. Similarly, for respondents in the low reference effort condition (“typically takes most consumers four shopping trips”), the mean estimated number of trips was 5.7. Thus, the manipulation of reference effort produced the expected idiosyncratic [mis]fit conditions, with respondents in the high [low] reference effort condition indicating that it would take them significantly less [more] trips compared to the provided estimate for typical consumers (for both  $p < .001$ ).

*Results.* Consistent with the idiosyncratic fit hypothesis, when respondents were told that it typically takes most consumers eight trips to the grocery store in order to reach the \$300 purchase level (i.e., high reference effort  $\Rightarrow$  high idiosyncratic fit), increasing the program

requirements from \$900 to \$1,500 of payments at the grocery store led to a significantly higher mean likelihood of joining the program ( $M = 4.3$  vs.  $M = 5.3$ ,  $t = 1.7$ ;  $p < .05$ ). Conversely, when respondents were told that it typically takes most consumers only four shopping trips to make \$300 of payments (i.e., low reference effort  $\Rightarrow$  low idiosyncratic fit), the positive effect of program requirements was eliminated for likelihood of joining ( $M = 4.9$  in the low program requirements condition vs.  $M = 4.5$  in the high program requirements condition; *n.s.*). An ANCOVA, using respondents' self-estimated number of trips as a covariate, revealed that the interaction between idiosyncratic fit and program requirements on the likelihood of joining was statistically significant and in the hypothesized direction ( $F = 4.2$ ;  $df = 1$ ;  $p < .05$ ).

We also examined the results for the willingness-to-pay (WTP) membership fees, which were in the hypothesized direction: in the high idiosyncratic fit condition, greater program requirements led to a higher mean WTP ( $M = \$3.5$  vs.  $M = \$9.8$ ,  $t = 1.7$ ;  $p < .05$ ), whereas in the low idiosyncratic fit condition, greater requirements led to a lower mean WTP ( $M = \$5.8$  vs.  $M = \$2.2$ ,  $t = 1.7$ ;  $p < .05$ ). In addition, greater idiosyncratic fit due to higher reference effort led to a marginally significant higher mean WTP ( $M = \$4.1$  vs.  $M = \$6.6$ ;  $F = 3.2$ ;  $df = 1$ ;  $p < .1$ ). However, as one might expect, the WTP data revealed that more than half of the respondents indicated a zero WTP membership fees. Thus, although the WTP results are consistent with our analysis, given that most current programs do not charge joining fees, WTP does not seem to be an effective measure of perceived program value.

In summary, the results of the grocery store LP essentially replicate the pattern obtained in the gas station and department store LPs and provide further support for the notion that it is the perceived idiosyncratic [mis]fit that underlies the preferences for the LPs. In particular, this study demonstrates that idiosyncratic fit can also be manipulated by varying the reference effort, while holding the individual effort constant. This manipulation increased the salience of both the reference effort and the comparison between the reference and individual efforts. Although such explicit comparisons are not uncommon in the marketplace (e.g., an ad might encourage consumers to make certain comparisons), an important question is whether consumers would



spontaneously consider the gap between reference and individual effort (i.e., idiosyncratic fit) without being prompted to do so. To address this issue, we conducted an additional test of the idiosyncratic fit hypothesis in Study 3 using an implicit manipulation of perceived reference effort. Also, to gain further insight into the mechanism underlying the responses to LPs, we included in Study 3 a process measure to assess the perceived idiosyncratic fit.

### Study 3: A Test of the Idiosyncratic Fit Heuristic Using an Implicit Manipulation of Reference Effort

Perceptions of the implicit idiosyncratic fit of LPs might be influenced by selectively providing accelerated earning opportunities (or “effort discounts”), such as double miles or points that apply only to a sub-segment of consumers. For instance, many current LPs provide “double-points” for purchases made at specific sites or “earn-partners,”<sup>4</sup> or for members who are affiliated with some specific “ally program.” One example is the American Express *Membership Rewards*<sup>®</sup> program that offers one point for every dollar of purchases using their credit card. This program has recently begun offering double-points for purchases made at several specific grocery or gasoline chains. Further, AMEX mails this offer to members and includes information regarding the participating grocery and gasoline chains that happen to be located near the member’s home.

With such limited offers, as the scope of earn-partners for double-points is reduced, for example, from all grocery chains to only one chain, consumers who receive double-points in both cases are likely to perceive their idiosyncratic fit as greater in the latter, more exclusive case. That is, while their individual effort has not changed (they receive double-points for grocery purchases in both scenarios), the perceived reference effort may increase, because fewer program members would now qualify for the double-points. Such a manipulation of reference effort does not explicitly mention the consumption habits or efforts of typical other consumers and thus does not create an explicit contrast between individual and reference effort.

---

<sup>4</sup> An “earn-partner” offers the sponsor’s program currency (e.g., points or miles) as a reward to customers who buy the earn-partner’s products/services (Website Colloquy.Com).

*Method.* The respondents were 164 airport travelers. Perceived idiosyncratic fit was manipulated by varying the perception of the reference effort. Specifically, in the low idiosyncratic fit condition, respondents were told that a credit card LP (see Figure 4) offers double-points for every dollar spent at any grocery chain and at any gasoline chain (low reference effort  $\Rightarrow$  low idiosyncratic fit). In the high idiosyncratic fit condition, on the other hand, respondents were told that the credit card LP offers double-points for every dollar spent at one particular grocery chain and at one particular gasoline chain, which happened to be where they regularly purchased groceries and gasoline (high reference effort  $\Rightarrow$  high idiosyncratic fit). Thus, while the individual effort was the same for respondents in both conditions (i.e., all respondents enjoyed the double-points offer), the reference effort was higher in the second case because fewer consumers in the general population would enjoy the double-points offer. The level of program requirements was either accumulating 5,000 points or 10,000 points (i.e., low versus high program requirements), and the reward was a Compton's encyclopedia CD-ROM. Respondents were asked to rate the likelihood that they would join the program.

-----  
Insert figure 4 about here  
-----

Next, respondents rated how hard or easy it would be for them to comply with the program's requirements compared to most consumers. The ratings were on a 1 (much harder for me) to 7 (much easier for me) effort dis/advantage scale, which served as a measure for perceived idiosyncratic fit. This measure of perceived effort advantage was expected to be a function of the interaction between the level of program requirements and the idiosyncratic fit manipulation: in the high idiosyncratic fit condition, greater program requirements were expected to enhance respondents' perception that the program was easier for them, and vice-versa in the low idiosyncratic fit condition. Finally, we expected that perceived effort advantage would mediate the interaction effect between program requirements and idiosyncratic fit condition on the likelihood of joining the program.

*Idiosyncratic fit manipulation check.* Consistent with the idiosyncratic fit manipulation, respondents in the high reference effort condition (i.e., high idiosyncratic fit) rated the program on average as easier for them compared to typical others than did respondents in the low reference effort condition ( $M = 4.4$  vs.  $M = 3.8$ ,  $t = 1.9$ ;  $p < .05$ ). Thus, the manipulation of double-points for purchases made at “any” versus at the respondents’ “favorite” grocery and gasoline chains created the expected perception of idiosyncratic fit. Moreover, an ANOVA revealed that the interaction between the idiosyncratic fit manipulation and the level of program requirements on the perceived effort advantage was statistically significant and in the expected direction ( $F = 4.4$ ;  $df = 1$ ;  $p < .05$ ). Specifically, in the high idiosyncratic fit condition, increasing the program requirements led respondents to perceive the program as easier to comply with compared to most other consumers ( $M = 4.2$  vs.  $M = 4.7$ ). Conversely, in the low idiosyncratic fit condition, increasing the program requirements led respondents to perceive compliance with the program as harder for them compared to most others ( $M = 4.1$  vs.  $M = 3.4$ ). This result is consistent with the notion that the idiosyncratic fit manipulation affected the gap between individual and reference effort in the expected direction by shifting the perceived reference effort (see right-hand side of Figure 1).

*Results.* Consistent with the idiosyncratic fit hypothesis, an ANOVA revealed that the interaction between idiosyncratic fit (manipulated via reference effort) and program requirements on joining likelihood was statistically significant and in the hypothesized direction ( $F = 5.8$ ;  $df = 1$ ;  $p < .05$ ). When respondents were told that the double-points were offered for every dollar spent at the particular grocery chain and gasoline chain that they usually patronize (i.e., high reference effort  $\Rightarrow$  high idiosyncratic fit), increasing program requirements from 5,000 points to 10,000 points led to a significant increase in the respondents’ reported likelihood of joining the program ( $M = 3.8$  vs.  $M = 5.4$ ,  $t = 2.2$ ;  $p < .05$ ). By contrast, when respondents were told that double-points could be obtained at any grocery or gasoline chain (i.e., low reference effort  $\Rightarrow$  low idiosyncratic fit), increasing program requirements led to a marginally significant decrease

in the likelihood of joining the program ( $M = 3.1$  vs.  $M = 2.2$ ,  $t = 1.3$ ;  $p < .1$ ). In addition, consistent with the idiosyncratic fit manipulation, across the two levels of program requirements, greater idiosyncratic fit led to a statistically significant higher likelihood of joining ( $M = 2.7$  vs.  $M = 4.5$ ;  $F = 13.2$ ;  $df = 1$ ;  $p < .001$ ).

A mediation analysis (Baron and Kenny 1986) indicated that the measure of perceived effort advantage mediated the interaction between idiosyncratic fit condition and program requirements on the likelihood of joining. In particular, the following three conditions for mediation were supported: (1) the independent variables (i.e., requirement level x idiosyncratic fit condition) significantly affected the mediator (i.e., perceived effort advantage), as reported above; (2) the independent variables significantly affected the dependent variable (i.e., likelihood of joining the credit card LP), per the idiosyncratic fit hypothesis; and (3) the mediator affected the dependent variable ( $F = 61.0$ ;  $df = 1$ ;  $p < .001$ ) when the independent variables were also included in the analysis, and thus, the effect of the independent variables on the dependent variable was attenuated ( $F = 2.2$ ;  $df = 1$ ;  $p > .1$ ). These results support the mediating role of perceived idiosyncratic fit and the proposed underlying mechanisms for the observed LP preferences.

In summary, the credit card test provides further support for the proposition that consumers (over)rely on an idiosyncratic fit heuristic when assessing the value of loyalty programs. In particular, this study manipulated idiosyncratic fit by influencing the perception of the reference effort without explicitly evoking the typical other consumer or the contrast between individual and reference effort. Even with this subtle manipulation, respondents perceived their effort advantage to be greater in the high idiosyncratic fit condition, and the effort advantage was further enhanced when the program requirements were increased. The opposite pattern was observed for respondents in the low idiosyncratic fit condition. Finally, the perception of the effort [dis]advantage (i.e., perceived idiosyncratic [mis]fit) mediated the effects on joining likelihood predicted by the idiosyncratic fit hypothesis.

#### Study 4: Spontaneous Use of the Idiosyncratic Fit Heuristic in Evaluations of a Loyalty Program

So far, all of the tests of the idiosyncratic fit heuristic have involved a manipulation of fit. A question that naturally arises is whether consumers spontaneously consider their idiosyncratic fit (or lack of fit) with LPs, even when there are no explicit cues for (or manipulations of) such [mis]fit. Accordingly, in this study, we investigate the idiosyncratic fit heuristic using an unobtrusive measurement of consumers' pre-existing tastes (i.e., after consumers make their decision), rather than a manipulation of individual or reference effort. Moreover, to allow for a particularly realistic test of the idiosyncratic fit heuristic, the participants in the present study were asked to make decisions with real potential consequences.

This study also allows us to test an alternative explanation (hereafter, the "signaling" account) for the effect of program requirements on preference toward loyalty programs. A great deal of research has shown that higher cost (e.g., higher price) sometimes signals higher quality or value (e.g., Zeithaml 1988). Furthermore, it might be argued that the rewards used in Studies 1-3 involved some value uncertainty. It is, thus, possible that higher program requirements enhanced the perceived worth of rewards, which could account for the positive impact of higher LP requirements on joining likelihood. This account cannot explain the interaction between program requirements and idiosyncratic fit and the finding that, in the low fit condition, greater requirements do not increase joining likelihood. Moreover, in each scenario, we provided a detailed description and a color picture of the reward, which should reduce the uncertainty about the reward's value. Nevertheless, the present study directly examined the signaling account by (a) using rewards with well-known or specified value (e.g., a movie ticket), and (b) examining whether participants perceived the reward as more valuable when it was contingent on greater effort requirements.

*Method.* The participants were 195 students at a large East Coast university. Participants were recruited at an on-campus food court. There are multiple restaurants in this dining area, including a sushi bar and a sandwich shop. Participants were informed that there was a plan

under consideration to start a “frequent diner” program that would reward students for their patronage at the various dining locations on the university campus. They were asked to complete a questionnaire that was described as part of an effort to determine the level of interest in such a program and whether it should be launched.

Participants were randomly assigned to either a low or high program requirements condition. All participants were told that they would be required to pay a one-time membership fee of \$2 and carry a “Frequent Diner Card” that would be used for tracking their purchases. In the low requirements condition, program participants would have to purchase twelve sandwiches at any on-campus dining location, whereas in the high requirements condition they would have to buy twelve sandwiches *and* twelve sushi meals. In both conditions, participants who complete the required effort would earn a movie ticket (good at any local movie theater) and a \$10 pre-paid phone card (good for 100 minutes of domestic calls within the U.S.). Figure 5 presents the “Frequent Diner Card” shown to participants in each condition.

-----  
Insert figure 5 about here  
-----

Participants were asked to indicate whether or not they would join the program. Participants were also asked to rate the likelihood that they would join this program on an eleven-point scale ranging from “Very Unlikely to Join this program” (-5) to “Very Likely to Join this program” (5). Next, participants were given an additional page on which they were asked to rate how difficult or easy it would be for them, compared to typical other students, to complete (A) twelve sushi purchases at on-campus restaurants; and (B) twelve sandwich purchases at on-campus restaurants. The ratings were on a seven-point scale ranging from “Much more difficult for me than for typical students” (1) to “Much easier for me than for typical students” (7). In addition, to test the signaling account, a sub-sample of participants were asked to indicate how much they thought one movie ticket (good at any movie theater in the local city) typically costs.

The perceived effort advantage in completing twelve sushi purchases served as the

measure of perceived idiosyncratic fit. Recall that the only difference between the low and high requirement conditions was that the latter required twelve additional sushi purchases. Thus, for participants who found it easy (relative to others) to complete sushi purchases, the high requirements condition was expected to enhance the perception of fit relative to the low requirement condition, which did not require buying sushi. Conversely, participants for whom the sushi requirement was relatively difficult were expected to perceive the high requirements program as providing an idiosyncratic misfit. We intentionally selected sandwich and sushi purchases as the program requirements, because the appeal of sandwiches was expected to be more universal, whereas the preference toward sushi was likely to be segmented, with some students craving sushi and others disliking it. Further, it is reasonable to assume that most students probably knew that the appeal of sushi tended to be segmented and the appeal of sandwiches was more universal, which was expected to enhance the perception of idiosyncratic [mis]fit with the high requirements program for individuals that crave [dislike] sushi.

Figure 6 summarizes graphically the study's design and the (expected) effect of program requirements on perceived idiosyncratic fit and misfit (using the framework presented in Figure 1). In the low requirements condition (i.e., 12 sandwich purchases), we expected that participants would perceive their individual effort in complying with the program to be similar to the reference effort of typical others, regardless of whether or not these participants liked sushi. In the high requirements condition (i.e., 12 sandwich + 12 sushi purchases), we expected that those who liked sushi ("sushi lovers") would perceive their individual compliance effort as lower than that of (the reference) typical students, thus providing them with an idiosyncratic fit. Conversely, those who disliked sushi ("sushi haters") were expected to perceive their individual effort in complying with the high requirements as greater than the reference effort (i.e., idiosyncratic misfit).

-----  
Insert figure 6 about here  
-----

*Results.* Participants were divided into two groups, "sushi haters" and "sushi lovers," based on a median split of their reported effort dis/advantage in completing twelve sushi

purchases (means and standard deviations of relative sushi ease ratings in the “sushi haters” and “sushi lovers” groups were 1.7 [*s.d.* = .85] and 4.9 [*s.d.* = .90], respectively). These two groups represent the two levels of (measured) idiosyncratic fit. We then used logistic regression to test the idiosyncratic fit hypothesis, which predicts that higher program requirements will enhance [decrease] the tendency to join the program for sushi lovers [haters]. The dependent variable received a value of 1 if the participant decided to join and 0 otherwise. The independent variables included the program requirements condition (12 sandwich purchases vs. 12 sandwich + 12 sushi items), the idiosyncratic fit level, and the interaction between the requirement condition and the idiosyncratic fit level.

As predicted by the idiosyncratic fit hypothesis, the interaction between the measured idiosyncratic fit and the program requirements was statistically significant and in the hypothesized direction (wald- $\chi^2 = 22.0$ ;  $p < .001$ ). Among participants with perceived idiosyncratic fit (“sushi lovers”), increasing the program requirements from 12 sandwich purchases to 12 sandwich + 12 sushi purchases led to a marginally significant higher share of participants who chose to join the program (58% vs. 73%;  $t = 1.5$ ;  $p < .1$ ). Conversely, as expected, among participants with perceived idiosyncratic misfit (“sushi haters”), increasing the requirements led to a significantly lower rate of joining the program (82% vs. 29%;  $t = 6.5$ ;  $p < .001$ ). We obtained similar results when, instead of a median-split, we used in the logistic regression analysis the continuous measure of sushi effort dis/advantage ( $p < .001$ ).

The pattern of results is also similar if the eleven-point joining likelihood is used as the dependent variable. In particular, consistent with the idiosyncratic fit hypothesis, there was a statistically significant interaction between the measured groups of idiosyncratic fit and the program requirements ( $F = 27.0$ ;  $df = 1$ ;  $p < .001$ ). Among participants with perceived idiosyncratic fit (“sushi lovers”), greater program requirements led to a significantly higher rated likelihood of joining ( $M = 0.6$  vs.  $M = 2.0$ ;  $t = 1.9$ ;  $p < .05$ ), whereas among participants with perceived idiosyncratic misfit (“sushi haters”), greater requirements led to a significantly lower likelihood of joining ( $M = 1.9$  vs.  $M = -1.4$ ;  $t = 5.5$ ;  $p < .001$ ). Again, we obtained similar results



using the continuous measure of sushi effort dis/advantage ( $p < .001$ ).

Because the perception of idiosyncratic fit was measured rather than manipulated, there exists a risk of confounding effects due to unobservable differences between the two groups. In particular, “sushi lovers” and “sushi haters” might differ with respect to their preference toward sandwiches. However, we did not find such a difference - the mean sandwich effort dis/advantage rating for “sushi haters” was 4.0 on the 1-7 scale [*s.d.* = 1.9] and 4.2 for “sushi lovers” [*s.d.* = 1.8]. Accordingly, the inclusion of the sandwich effort dis/advantage measure as a covariate in the model did not attenuate the statistical significance of the interaction between requirement level and measured idiosyncratic fit. Finally, participants in the high requirement conditions did not estimate a higher cost for one movie ticket than participants in the low requirement condition ( $M = \$9.8$  vs.  $M = \$9.7$ ;  $t = .9$ ;  $p > .1$ ), which is inconsistent with the signaling account.

In summary, the frequent diner study demonstrated the impact of the idiosyncratic fit heuristic using an unobtrusive measure of idiosyncratic fit, in the context of an actual loyalty program with real potential consequences. Consistent with the earlier results, participants with idiosyncratic fit (“sushi lovers”) were more likely to prefer a dominated program that required them to purchase 12 sandwiches as well as 12 sushi orders. Finally, the fact that these results were obtained with rewards that have well-defined and familiar values provides evidence that signaling cannot explain the obtained pattern of results.

## **GENERAL DISCUSSION**

Customer relationship management (CRM) and one-to-one marketing have been widely adopted by companies and have received a great deal of attention from marketers, consultants, and, to a lesser degree, academics. An important goal of such marketing strategies is the development of customer loyalty, often employing loyalty programs. In this article, we propose that a key factor contributing to the success or failure of LPs at the individual level is idiosyncratic

fit, namely the perceived relative advantage that a program provides to an individual customer. In this section, we discuss the theoretical and practical implications of the present findings.

### Key Findings and Theoretical Implications

*Review of Key Findings.* We proposed that consumers employ an idiosyncratic fit heuristic, whereby the dis/advantage of a consumer relative to a reference effort (e.g., the effort for most other consumers) is used as a cue for assessing the attractiveness of a LP and contributes to the overall perceived value of that program. Similar to other heuristics, although using it is often reasonable and helpful, over-applying it can lead to biases and counter-normative decision-making (e.g., Kahneman, Slovic, and Tversky 1982). In particular, we hypothesized that, under perceived idiosyncratic fit, increasing the effort requirement of a LP can enhance the perceived advantage of the consumer and thus the attractiveness of the program. This prediction was supported in a series of studies employing different methodologies.

In Study 1, the idiosyncratic fit manipulation involved changing the consumer's individual effort (e.g., the distance from the department store). This study left open the possibility that consumers evaluate programs solely on the basis of their own individual effort and not in relation to the reference effort of typical others. Study 2 (grocery store LP) addressed this limitation using a manipulation of idiosyncratic fit that varied the perceived reference effort of typical others. This was accomplished by informing respondents about the consumption rate of groceries (i.e., high vs. low) of typical consumers. Still, the study involved a rather salient and explicit manipulation of reference effort, which may not reflect typical consumer decisions in the marketplace.

Accordingly, Study 3 (credit card LP) employed an implicit and more subtle manipulation of the perceived reference effort and idiosyncratic fit, using a double-points offer to either a narrow or a broad segment of consumers. Again, under perceived idiosyncratic fit (i.e., the offer is limited to a narrow segment that includes the consumer), greater requirements increased the likelihood of joining the program.

The final study (frequent diner program) allowed for a particularly strong test of the idiosyncratic fit heuristic, using decisions with real potential consequences and an unobtrusive, post-decision measurement (rather than manipulation) of fit. The study demonstrated that consumers, for whom a particular effort requirement (purchasing sushi) was easy relative to others, were more likely to join a dominated program that included the easier effort as an added requirement. These results suggest that consumers often spontaneously (over)employ the idiosyncratic fit heuristic, even without being prompted to do so. In particular, a consumer's perception of fit is likely to play a role in determining preferences if the consumer perceives that fit as unique relative to most others.

*The Role of the Idiosyncratic Fit Heuristic in Judgment and Decision-Making.* The notion of idiosyncratic fit is related to research on the impact of others' welfare or satisfaction on one's own preferences in contexts such as negotiation (Corfman and Lehmann 1993; Loewenstein, Thompson, and Bazerman 1989), competition (Lehmann 2001), game theory (e.g., Feinberg, Krishna, and Zhang 2002; Rabin 1993), and equity and justice (e.g., Lind and Tyler 1988; Adams 1965; Messick and Cooke 1983). For example, Feinberg, Krishna, and Zhang (2002) recently demonstrated that consumers are affected not only by prices they themselves are offered, but also by prices available to others, which has implications for the design of targeted promotions. And, in a different domain, Bazerman et al. (1992) showed that people often evaluate their outcomes (e.g., a salary raise) based on a comparison with others, rather than based on absolute values. Relatedly, some authors have suggested that the sensitivity of satisfaction to the consumption and income level relative to others, rather than to absolute levels, has led the majority of working Americans to overwork and experience leisure as an unaffordable luxury (Schor 1991; see also Frank 1985; Kivetz and Simonson 2002b).

Support for the notion that preferences are sensitive to the outcomes of others is also found in research on interpersonal attraction. Specifically, Walster et al. (1973) found two factors that contributed to a woman's desirability (i.e., according to male subjects): (1) how "hard to get" she was for the subject, and (2) how hard to get she was for other men. Subjects

were significantly more likely to prefer to date a selectively hard to get woman (i.e., a woman that was easy for the subject to get but hard for all other men to get) over both a uniformly hard to get woman and a uniformly easy to get woman. Although Walster et al. (1973) did not explain their results using the notion of idiosyncratic fit (but rather based on social desirability considerations), their findings are consistent with this principle and with the pattern of preferences toward loyalty programs observed in the present research.

We believe that the idiosyncratic fit heuristic plays a role in many other domains, including consumer responses to different promotional and product offers. In particular, consumers may overweigh aspects that, although relatively less significant in absolute terms, happen to fit their idiosyncratic and possibly unconventional preferences. Similarly, consumers might avoid options that fit the preferences of others better. This tendency can account for previous findings indicating that consumers tend to reject options that include costless and unneeded optional features (Simonson et al. 1994) and options that are selected by other consumers for personally irrelevant reasons (Simonson et al. 1993). Future research could examine factors that moderate the weight of idiosyncratic fit in judgment and decision making, such as context and task characteristics (e.g., type of consumption, cognitive and/or motivational resources), individual differences (e.g., demographics, need for achievement, sensitivity to social comparisons, need for cognition), and cultural norms.

For example, although we did not a priori expect gender to moderate the impact of idiosyncratic fit, we did record the respondents' gender in Studies 1 and 4 reported above. In both studies the results indicated that the influence of idiosyncratic fit was particularly pronounced among women (see Table 1). For example, in Study 4, female students who rated purchasing sushi as easier for them than for other students (i.e., high idiosyncratic fit respondents) were more likely to join the program under high as opposed to low requirements (71% vs. 47%;  $t = 1.6$ ;  $p < .1$ ). Conversely, the effect of (high) idiosyncratic fit on men was in the expected direction but did not approach statistical significance (75% vs. 65%;  $t = 0.7$ ;  $p > .2$ ).

-----  
Insert table 1 about here  
-----

Although these tentative findings need to be replicated and investigated further in future research, the apparent gender effect is consistent with a growing body of research regarding the role of the interdependent- versus the independent-self for women compared to men. This research suggests that U.S. women tend to maintain an interdependent self-construal, whereby self-definition is related to others, whereas U.S. men tend to maintain an independent self, whereby self-definition is based on one's unique attributes (e.g., Markus and Oyserman 1989). Relatedly, women's judgement of their likely performance on tasks (self-evaluations) has been found to be sensitive to their partner's ability, while men's judgments are not (Lenney, Gold, and Browning 1983). The notions that females engage in more elaborate and motivated social perception and that they tend to be more interdependent and attentive to information concerning others (for reviews see Cross and Madson 1997; Meyers-Levy 1989) suggests that they will weigh more heavily in their decisions the fit of a program for them relative to others.

Another potentially important moderator of the impact of idiosyncratic fit is the notion that this and possibly other heuristics are more effective when they are incidental, self-generated, and/or occur spontaneously, without being triggered or highlighted by the seller (for a related discussion, see Friestad and Wright 1994). Specifically, we posit that consumers will weigh their idiosyncratic fit with LPs or other marketing promotions more heavily when they perceive this fit as incidental rather than deliberately designed by the marketer. This effect is likely to be asymmetric – the perception of idiosyncratic *misfit* may be especially damaging (i.e., decrease the option's perceived attractiveness) when it is construed as intentional as opposed to incidental. The effects of premeditated versus incidental fit on consumer preference and the related underlying mechanisms merit further research.

Although we have focused on the impact of idiosyncratic fit on consumer choice, the use of this heuristic may also have important consequences for post-decisional satisfaction. In particular, consumers may be more satisfied with the outcome of their choices and with products

and services when they have relied on idiosyncratic fit in making their purchase decisions, even though they may have (unknowingly) violated value maximization. Future research can examine the notion that idiosyncratic fit enhances not only decision utility, but also experience, consumption, and/or remembered utility (e.g., Hsee 1999; Kahneman 1999; Kahneman and Varey 1991).

### Practical Implications

Beyond the theoretical significance of the idiosyncratic fit heuristic, it has important practical implications for loyalty programs, CRM, one-to-one marketing, and other promotional tactics and offers that are designed for individual customers. According to the one-to-one marketing approach (Peppers and Rogers 1993), companies should strive to establish learning relationships with individual customers and then use what they have learned to design customized offers, thus enhancing customer loyalty. However, the present research suggests that understanding the relative fit of individual customers to specific offers and options may often be more important than measuring their “absolute” preferences, which are often fuzzy and unstable. That is, a one-to-one marketer may not gain a significant competitive advantage if the offer made fits the preferences and unique conditions of the particular customer no better than the preferences and conditions of other customers. Conversely, offers that provide idiosyncratic fit, even if that fit relates to a less important dimension, can have a significant impact on customer evaluations and loyalty.

The findings also indicate that marketers can increase participation in LPs by designing programs that foster the perception of fit (i.e., without appearing deliberate; see earlier discussion). The perception of idiosyncratic fit can be enhanced by highlighting, for example, (a) the proximity of a store offering a LP to the customer; (b) the higher purchase frequency of the customer relative to others; and (c) the perceived exclusiveness of a double-points offer (e.g., by suggesting close establishments where double-points can be earned or by limiting the offer to a specific town). The growing availability of information about consumers and business

customers makes such idiosyncratic fit based strategies more feasible than before (see, e.g., Blattberg and Deighton 1991).

Furthermore, by creating or emphasizing the perception of idiosyncratic fit programs can require more effort for a relatively small enhancement of the reward. That is, idiosyncratic fit based strategies can enable marketers to decrease the program's funding rate (the reward-to-effort ratio), without a significant drop in participation rates. In essence, idiosyncratic fit lowers the "effort elasticity of participation." Although existing LPs do not permit a rigorous test of this implication, there are indications that highly loyal members, who are likely to perceive themselves as having an idiosyncratic fit with the program, are greatly motivated by programs with very high requirement levels (e.g., Colloquy 1997; Rose 1988).

It is important to note that competition may eliminate the ability to reduce the funding rate without considerable consumer reactance. For instance, consumers who make direct comparisons between programs that have substantially different funding rates are likely to prefer the more generous program. However, the decision facing consumers is typically not which of two or more LPs to choose, but whether to enroll in a particular program. Furthermore, marketers often make it difficult to compare between programs by using different denominations of effort (e.g., points, miles, dollars spent, or number of purchases) and/or by using different dollar-to-point conversion rates (e.g., 1 point/\$1 spent, 10 points/\$1 spent, or 1 point/\$10 spent). Indeed, as Kivetz and Simonson (2000) note, by representing attribute levels with different labels or scales, marketers might be able to discourage consumers from making certain within attribute comparisons that do not favor their offering.

Nevertheless, in industries in which comparable LPs exists, de facto standards might emerge regarding the denomination of effort and the appropriate funding rate. For example, in the airline industry, "miles" are the standard scale for efforts, and most frequent flyer programs require approximately 25,000 miles for a free roundtrip domestic ticket. Thus, a program that increases this requirement to 50,000 miles is unlikely to attract many members. However, even in the airline industry, we are starting to see programs that offer non-flight rewards and/or

require accumulating points (e.g., Alaska Airlines) or flight-segments (e.g., Southwest Airlines) instead of miles (Lisser 1995). These innovations can help firms lower the funding rate without triggering a consumer backlash.

Finally, using the idiosyncratic fit heuristic to influence customers' decisions may appear unethical. However, just as marketers employ differentiation and versioning strategies that are intended to extract consumer surplus, a calculated use of the idiosyncratic fit heuristic can be regarded as a legitimate means for promoting loyalty programs and other products and services. At the same time, it is important to educate consumers about the disadvantages of over-relying on the valuations, tastes, and outcomes of others when making decisions. This recommendation is also made in the Talmud, which asks, "Who is rich?" and answers, "He who is happy with his share." Indeed, although following this guideline may be difficult, people can make better choices by avoiding comparisons with the costs and benefits of others.



**TABLE 1**

**GENDER AS A MODERATOR OF IDIOSYNCRATIC FIT**

**Share of Consumers Joining the Frequent Diner Program**

Gender	Idiosyncratic Fit	Program Requirements	Percent Joining
Females	High	Low	47%
		High	71%
	Low	Low	85%
		High	25%
Males	High	Low	65%
		High	75%
	Low	Low	79%
		High	33%

**Likelihood of Joining the Department Store Program**

Gender	Idiosyncratic Fit	Program Requirements	Mean Joining Likelihood (0-10)
Females	High	Low	4.5
		High	5.8
	Low	Low	3.8
		High	2.5
Males	High	Low	4.3
		High	5.0
	Low	Low	3.5
		High	3.1

**FIGURE 1**

**EFFORT PERCEPTIONS IN LOYALTY PROGRAMS**

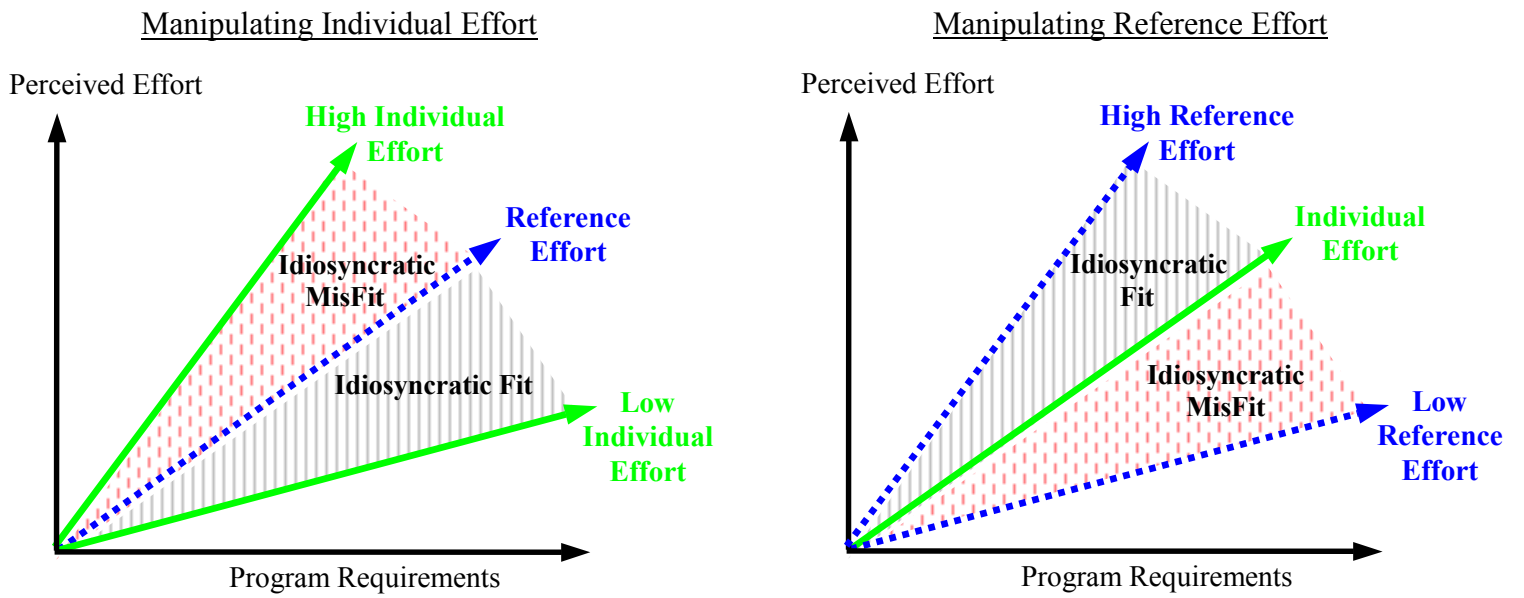


FIGURE 2A<sup>5</sup>

**GAS STATION FREQUENCY PROGRAM**

Frequent Gas Station Customer

Imagine that your favorite, local gas station offers a loyalty reward program. This gas station is close to your house and usually you fill your tank there anyway. [This gas station is located 10 miles away from your house.] According to this program, after you purchase gasoline at the gas station 10 [20] times (each purchase must be over \$10), you will earn a car vacuum cleaner (described below).

Car Vacuum Cleaner

- Cleans both dry and wet areas
- Compact, light, & easy to use
- Comes with a coil cord that plugs into the cigarette lighter
- Includes a brush attachment to scrub rugs and to loosen dried mud
- Also includes a crevice tool for hard to reach areas
- One year warranty



Likelihood of joining the program (0-10)\_\_\_

FIGURE 2B

**DEPARTMENT STORE FREQUENCY PROGRAM**

Department Store Frequency Program

Imagine that your favorite department store offers a frequency reward program. This department store is close to your house and you shop there regularly. [This department store is located 20 miles away from your house.] According to this program, after you accumulate \$1,500 [3,000] of purchases at the department store, you will earn a Starbucks Barista™ home espresso machine complete with all the accessories and a dozen convenient Pod espresso packs (shown to the right).



Likelihood of joining the program (0-10)\_\_\_

<sup>5</sup> The introductions to both scenarios informed respondents that they will be asked to rate their likelihood of joining the program relative to typical programs they are familiar with, using an eleven-point scale ranging from “very unlikely to join” (0) to “very likely to join” (10).

### FIGURE 3

## GROCERY STORE FREQUENCY PROGRAM

### Grocery Store Frequency Program

Before you consider the grocery store program described below, please review the following data which we have collected in a previous study. The purpose of this information is to help you make a more informed decision. According to previous research we have conducted here at the airport and at Stanford, in eight [four] shopping trips to a grocery store (such as Safeway), consumers typically make \$300 of purchases.

1. How many trips to your favorite grocery store does it take you to reach \$300 of purchases: \_\_\_\_\_.

Now, imagine that your favorite local grocery store offers the frequency program below:

After you accumulate \$900 [\$1,500] of payments at the grocery store, you will earn an AT&T 100 Minute prepaid calling card. →



2. How likely would you be to join this grocery store program?  
Please answer by entering a number between 0 (Very Unlikely to join) and 10 (Very Likely to join): (0-10) \_\_\_\_\_

3. What is the maximum amount of money that you are willing to pay in order to participate in this program: \$US \_\_\_\_\_

---

**FIGURE 4**  
**CREDIT CARD FREQUENCY PROGRAM**

Credit Card Frequency Reward Program

Imagine that your credit card company offers a reward program where you earn 1 point for every dollar you charge on any of the company's cards. The program also offers double points for every dollar spent using the company's credit cards at one particular grocery chain and at one particular gasoline chain. These particular grocery and gasoline chains happen to be your favorite chains where you purchase groceries and gasoline regularly. [The program also offers double points for every dollar spent using the company's credit cards at any grocery chain and at any gasoline chain.]

According to the credit card reward program, after you accumulate 5,000 [10,000] points, you will earn a Compton's Encyclopedia™ 2000 Deluxe CD-ROM (includes thousands of articles, photos, videos, maps, charts, and sound clips; made by *The Learning Company*).

1. How likely would you be to join this program?  
Please enter a number from 0 (Very unlikely to join) to 10 (Very likely to join): \_\_\_\_\_.
  
2. How easy do you think it would be for you to accumulate the required 5,000 [10,000] points compared to most typical consumers?  
(circle the appropriate number)



Much harder for me than for most typical consumers    1   2   3   4   5   6   7    Much easier for me than for most typical consumers

**FIGURE 5**

**FREQUENT DINER PROGRAM CARD**

Low Requirements Condition:

**FREQUENT DINER PROGRAM**

After you buy twelve sandwiches (at any on-campus dining location), you will earn both one free movie ticket (good at any movie theater in [The City]) **AND** a \$10 pre-paid phone card (good for 100 minutes of domestic calls within the U.S.).

--- see program card below ---



High Requirements Condition:

**FREQUENT DINER PROGRAM**

After you buy both twelve sandwiches **AND** twelve sushi meals (at any on-campus dining location), you will earn both one free movie ticket (good at any movie theater in [The City]) **AND** a \$10 pre-paid phone card (good for 100 minutes of domestic calls within the U.S.).

--- see program card below ---

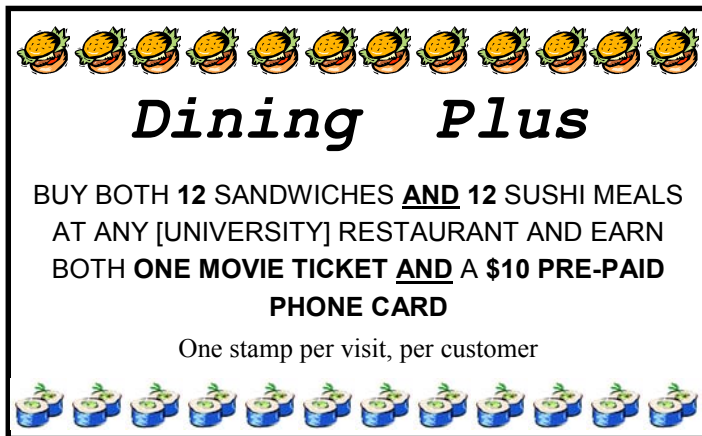
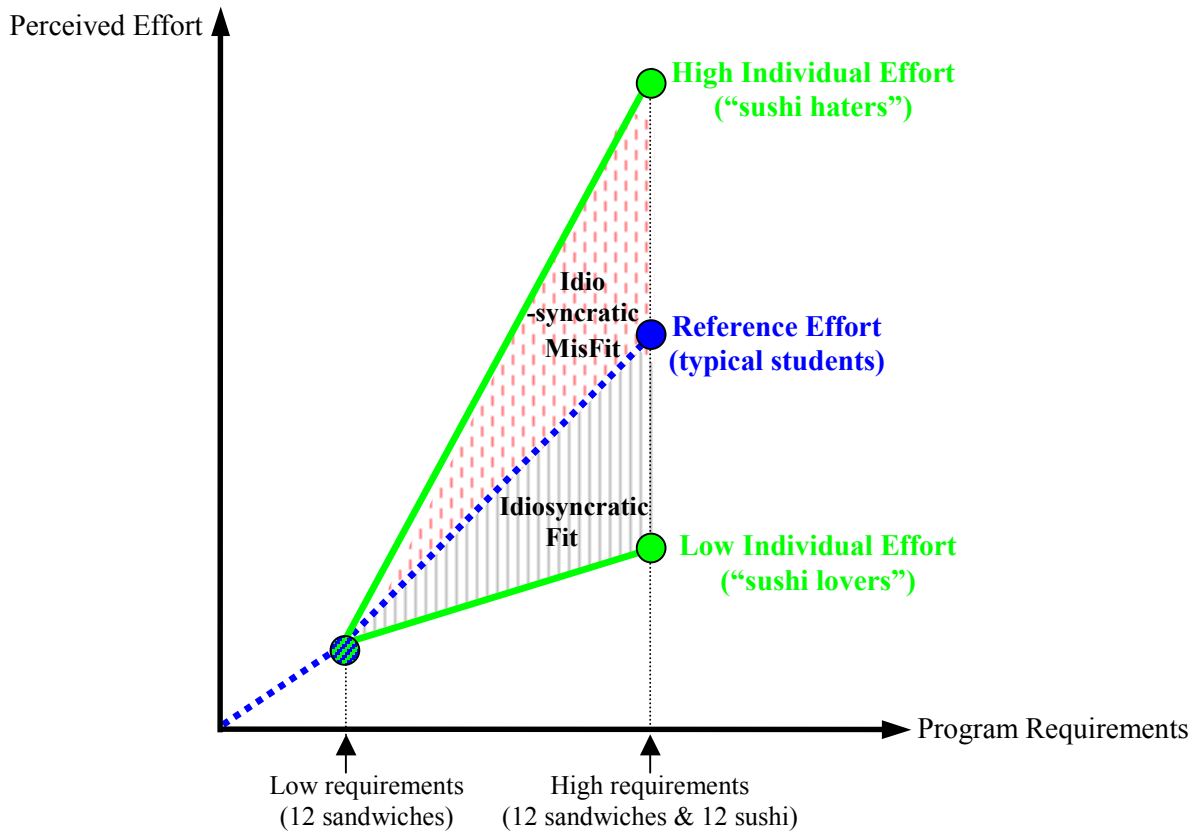


FIGURE 6

UNDERLYING EFFORT PERCEPTIONS IN THE FREQUENT DINER STUDY



## REFERENCES

- Adams, Stacy J. (1965), "Inequity in Social Exchange," in L. Berkowitz (Ed.), *Advances in Experimental Social Psychology*, 2, 267-299, New York: Academic Press.
- Baron, R.M. & D. Kenny. (1986). "The Moderator/Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations," *Journal of Personality & Social Psychology*, 51 (6), 1173-1182.
- Bazerman, Max H., George F. Loewenstein, and Sally B. White (1992), "Reversals of Preference in Allocation Decisions: Judging an Alternative versus Choosing among Alternatives," *Administrative Science Quarterly*, 37, 220-240.
- Bettman, James R., Mary Frances Luce, and John W. Payne (1998), "Constructive Consumer Choice Processes," *Journal of Consumer Research*, 25 (3) (December), 187-217.
- Blattberg, Robert C. and John A. Deighton (1996), "Manage Marketing by the Customer Equity Test," *Harvard Business Review*, July-August, 136-144.
- and ---- (1991), "Interactive Marketing: Exploiting the Age of Addressability," *Sloan Management Review*, 33 (Fall), 5-14.
- and Scott A. Neslin (1990), *Sales Promotion: Concepts, Methods, and Strategies*, New Jersey: Prentice-Hall.
- Borenstein, Severin (1996), "Repeat-Buyer Programs in Network Industries," in W. Sichel (eds.), *Networks, Infrastructure, and The New Task for Regulation*, University of Michigan Press.
- Colloquy (1997), "Frequent-Dining Programs: Missing Some Key Ingredients," 5 (4), 1-10.
- Corfman, Kim P. and Donald R. Lehmann (1993), "The Importance of Others' Welfare in Evaluating Bargaining Outcomes," *Journal of Consumer Research*, 20 (June), 124-137.
- Cross, Susan E. and Laura Madson (1997), "Models of the Self: Self-Construals and Gender." *Psychological Bulletin*, 122 (1), 5-37.



- Deighton, John A. (2000), "Frequency Programs in Service Industries," in Dawn Iacobucci and Teresa A. Swartz (eds.), *Handbook of Services Marketing and Management*, Thousand Oaks, California: Sage, 401-407.
- Drèze, X. and S.J. Hoch (1998), "Exploiting the Installed Base Using Cross-Merchandising and Category Destination Programs," *International Journal of Research in Marketing*, 15 (5), 459-471.
- Feinberg, Fred, Aradhna Krishna, and Z. John Zhang (2002), "Do we care what others get? A Behaviorist approach to targeted promotions," forthcoming, *Journal of Marketing Research*.
- Festinger, L. (1954), "A Theory of Social Comparison Processes," *Human Relations*, (7) 117-140.
- Frank, Robert (1985), *Choosing the Right Pond*, New York: Oxford University Press.
- Hsee, Christopher K., Frank Yu, and J. Zhang (2002), "Specious Maximization: Medium Effect in Decision Making," forthcoming in the *Journal of Consumer Research*.
- (1999), "Value Seeking and Prediction-decision Inconsistency: Why Don't People Take What They Predict They'll Like the Most?," *Psychonomic Bulletin & Review*, 6 (4) (December), 555-561.
- (1996), "The Evaluability Hypothesis: An Explanation for Preference Reversals Between Joint and Separate Evaluations of Alternatives," *Organizational Behavior and Human Decision Processes*, 67 (September), 247-257.
- Kahneman, Daniel (1999), "Objective Happiness," in Daniel Kahneman and Ed Diener (eds.), *Well-being: The Foundations of Hedonic Psychology*, 3-25.
- and Dale T. Miller (1986), "Norm theory: Comparing Reality to its Alternatives," *Psychological Review*, 93 (2), (April), 136-153.
- , Ilana Ritov, and David Schkade (1999), "Economic Preferences or Attitude Expressions? An analysis of Dollar Responses to Public Issues," *Journal of Risk and Uncertainty*, 19, 220-242.

- , Paul Slovic, and Amos Tversky (1982), (eds.) *Judgment Under Uncertainty: Heuristics and Biases*, New York: Cambridge University Press.
- and Carol Varey (1991), "Notes on the Psychology of Utility," in Jon Elster and John E. Roemer (eds.), *Interpersonal Comparisons of Well-being: Studies in Rationality and Social Change*, 127-163.
- Kim, Byung-Do, Mengze Shi, and Kannan Srinivasan (2001), "Reward Programs and Tacit Collusion," *Marketing Science*, 20 (2), 99-120.
- Kivetz, Ran and Itamar Simonson (2002a), "Earning the Right to Indulge: Effort as a Determinant of Customer Preferences Toward Frequency Program Rewards," *Journal of Marketing Research*, 39 (May), 155-170.
- and ---- (2002b), "Self Control for the Righteous: Toward A Theory Of Pre-Commitment To Indulgence," *Journal of Consumer Research*, 29 (2), (September), 199-217.
- and ---- (2000), "The Effects of Incomplete Information on Consumer Choice," *Journal of Marketing Research*, 37 (November), 427-448.
- Kopalle, Praveen K. and Scott A. Neslin (2000), "The Economic Viability of Frequency Reward Programs in a Strategic Competitive Environment," Dartmouth College working paper.
- Lind, E. Allan and Tom R. Tyler (1988), *The Social Psychology of Procedural Justice*, Plenum, New York.
- LaPointe, Pat (2002), "What's Next for Loyalty Marketing Programs?," *Colloquy*, 10 (1).
- Lehmann, Donald R. (2001), "The Impact of Altruism and Envy on Competitive Behavior and Satisfaction," *Journal of Research in Marketing*, 18, 5-17.
- Lenney, Ellen, Joel Gold, Chris Browning (1983), "Sex Differences in Self-confidence: The Influence of Comparison to Others' Ability Level," *Sex Roles*, 9 (9) (September) 925-942.
- Lisser, E. (1995), "Frequent Fliers View Awards of Jewels, Catered Feasts as Resistible Temptations," *Wall Street Journal*, November 8, p. B1.

- Loewenstein, George F., Leigh Thompson, and Max H. Bazerman (1989), "Social Utility and Decision Making in Interpersonal Contexts," *Journal of Personality & Social Psychology*, 57 (3), 426-441.
- Markus, Hazel R. and Daphna Oyserman (1989), "Gender and Thought: The Role of the Self-concept," in M. Crawford and M. Hamilton (Eds.), *Gender and Thought*, New York: Springer-Verlag, 100-127.
- Messick, David M. and Karen S. Cook (1983), *Equity Theory*, Praeger, New York.
- Meyers-Levy, Joan (1989), "Gender Differences in Information Processing: A Selectivity Interpretation," in Cafferata, Patricia and Alice M. Tybout (Eds), *Cognitive and Affective Responses to Advertising*, Lexington, MA, US: Lexington Books, 222–260.
- Nowlis, Stephen and Itamar Simonson (1997), "Attribute–Task Compatibility as a Determinant of Consumer Preference Reversals," *Journal of Marketing Research*, 34 (May), 205-218.
- Payne, John R., James R Bettman, and Eric J. Johnson (1992), "Behavioral Decision Research: A Constructive Processing Perspective," *Annual Review of Psychology*, 43, 87-131.
- Peppers, Don and Martha Rogers (1993), *The One to One Future: Building Relationships One Customer at a Time*, Currency/Doubleday.
- Rabin, Matthew (1993), "Incorporating Fairness into Game Theory and Economics," *American Economic Review*, 83 (December), 1281-1302.
- Rose, Robert L. (1988), "Frequent-Flyer Plans Become Obsessions," *Wall Street Journal*, Sep. 6, p. B1.
- Sausner, Rebecca (2001), "Making Points with Online Loyalty Programs," *eMarketing Magazine*, April, 32-35.
- Schindler, Robert M. (1998), "Consequences of Perceiving Oneself as Responsible for Obtaining a Discount: Evidence for Smart-Shopper Feelings," *Journal of Consumer Psychology*, 7 (4), 371-392.

- (1989), "The Excitement of Getting a Bargain: Some Hypotheses Concerning the Origins and Effects of Smart-Shopper Feelings," *Advances in Consumer Research*, 16, 447-453.
- Schor, Juliet B. (1991), *The Overworked American: The Unexpected Decline of Leisure*, New York, NY: Basic Books.
- Shoemaker, Stowe and Robert C. Lewis (1999), "Customer Loyalty: The Future of Hospitality Marketing," *Hospitality Management*, 18, 345-370.
- Simonson, Itamar, Ziv Carmon, and Suzanne O'Curry (1994), "Experimental Evidence on the Negative Effect of Product Features and Sales Promotions on Brand Choice," *Marketing Science*, 13 (1), 23-40.
- , Stephen Nowlis, and Yael Simonson (1993), "The Effect of Irrelevant Preference Arguments on Consumer Choice," *Journal of Consumer Psychology*, 2 (3), 287-306.
- Soman, Dilip (1998), "The Illusion of Delayed Incentives: Evaluating Future Effort-Money Transactions," *Journal of Marketing Research*, 35 (November), 427-437.
- Thaler, Richard H. (1999), "Mental Accounting Matters," *Journal of Behavioral Decision Making*, 12 (September), 183-206.
- (1985), "Mental Accounting and Consumer Choice," *Marketing Science*, 4 (Summer), 199-214.
- van Osselaer, Stijn M. J. and Joseph W. Alba (2002), "Schedules of Reinforcement and the Effectiveness of Loyalty Programs," University of Chicago working paper.
- Walster, Elaine G. William Walster, Jane Piliavin, and Lynn Schmidt (1973), "Playing Hard to Get': Understanding an Elusive Phenomenon," *Journal of Personality and Social Psychology*, 26 (1), 113-121.
- Winer, Russel S. (1986), "A Reference Price Model of Brand Choice for Frequently Purchased Products," *Journal of Consumer Research*, 13 (September), 250-256.
- Zeithaml, Valarie A. (1988), "Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence," *Journal of Marketing*, 52 (3), 2-22.

## Recent ISERP Working Papers

02-01 "Alternative Models of Dynamics in Binary Time-Series-Cross-Section Models: The Example of State Failure," Nathaniel Beck, Political Science, UC San Diego, David Epstein, Political Science, Columbia, Simon Jackman, Political Science, Stanford and Sharyn O'Halloran, Political Science, Columbia

02-02 "Substitutability Cross-Stream Between Oriented Markets: Conventions in the Wine Sector of France," Harrison White, Sociology, Columbia University

02-03 "Link, Search, Interact: The Co-Evolution of NGOs and Interactive Technology," Jonathan Bach, Center on Organizational Innovation, Columbia University and David Stark, Center on Organizational Innovation, Columbia University

02-04 "Chains of Affection: The Structure of Adolescent Romantic and Sexual Networks," Peter Bearman, Institute for Social and Economic Research and Policy, Columbia, James Moody, Sociology, Ohio State, Katherine Stovel, Sociology, University of Washington

02-05 "Permanently Beta: Responsive Organization in the Internet Era," Gina Neff, Center on Organizational Innovation (COI), Columbia University, and David Stark, Center on Organizational Innovation (COI), Columbia University

02-06 "Negotiating the End of Transition: A Network Approach to Political Discourse Dynamics, Hungary 1997," Balázs Vedres, Columbia University, Péter Csizs, Ecole des Hautes Etudes en Sciences Sociales

02-07 "The Influence of Women and Racial Minorities Under Panel Decision-Making in the U.S. Court of Appeals," Sean Farhang, Political Science, Columbia University, Gregory Wawro, Political Science, Columbia University

02-08 "The Role of Effort Advantage in Consumer Response to Loyalty Programs: The Idiosyncratic Fit Heuristic," Ran Kivetz, Graduate School of Business, Columbia University, Itamar Simonson, Graduate School of Business, Stanford University

01-04 "Opposite-Sex Twins and Adolescent Same-Sex Attraction," Peter Bearman, Sociology/ISERP and Hannah Brückner, Sociology, Yale

01-05 "On the Uneven Evolution of Human Know-How," Richard R. Nelson, Business/SIPA, Columbia

01-06 "Self-Control for the Righteous: Toward a Theory of Luxury Pre-Commitment," Ran Kivetz, Business, Columbia and Itamar Simonson, Business, Stanford

01-07 "Distributing Intelligence and Organizing Diversity in New Media Projects," Monique Girard, ISERP, Columbia and David Stark, Sociology, Columbia

01-08 "Agricultural Biotechnology's Complementary Intellectual Assets," Gregory D. Graff, Agricultural and Resource Economics, Berkeley, Gordon C. Rausser, Agricultural Economics, Berkeley and Arthur A. Small, SIPA/Earth Institute, Columbia

For copies of ISERP Working Papers  
visit [http://www.iserp.columbia.edu/initiatives/working\\_papers/paper\\_program.html](http://www.iserp.columbia.edu/initiatives/working_papers/paper_program.html),  
write to [iserp@columbia.edu](mailto:iserp@columbia.edu) or call 212-854-3081.

EDITORIAL BOARD

Karen Barkey, Sociology  
Peter Bearman, Sociology/ISERP  
Alan Brinkley, History  
Charles Cameron, Political Science  
Alessandra Casella, Economics  
Ester Fuchs, Political Science/SIPA  
John Huber, Political Science  
Ira Katznelson, Political Science/History  
Herbert Klein, History  
Mary Clare Lennon, Public Health  
Mahmood Mamdani, Anthropology  
Marianthi Markatou, Statistics  
William McAllister, ISERP  
Kathryn Neckerman, ISERP  
Richard Nelson, Business/SIPA  
Elliot Sclar, Architecture, Planning and  
Preservation/SIPA  
Seymour Spilerman, Sociology  
Charles Tilly, Sociology  
Harrison White, Sociology

ADMINISTRATION

Peter Bearman, Director  
Kathryn Neckerman, Associate Director  
Leslie Wright, Assistant Director

Institute for Social and Economic  
Research and Policy  
Columbia University  
International Affairs Building  
420 West 118 Street, 8<sup>th</sup> Floor  
Mail Code 3355  
New York, NY 10027  
telephone: 212-854-3081  
facsimile: 212-854-8925  
e-mail: [iserp@columbia.edu](mailto:iserp@columbia.edu)  
URL: <http://www.iserp.columbia.edu>