JOE A. DODSON, ALICE M. TYBOUT, and BRIAN STERNTHAL*

Analysis of panel data for two consumer packaged goods indicates that media-distributed coupons and cents-off deals induce brand switching and result in less loyalty when retracted than if no deal is offered. In contrast, package coupons stimulate brand loyalty which is maintained when they are retracted. The extent to which economic utility theory and self-perception theory order these findings is evaluated and the implications of the results for managing demand are discussed.

Impact of Deals and Deal Retraction on Brand Switching

INTRODUCTION

During the past five years, consumer deals such as cents-off the price marked on the package and cents-off coupons distributed via the media or in the package have emerged as an important part of the marketer's strategic arsenal. Between 1971 and 1974, the A.C. Nielsen Company reported that the number of coupons distributed increased from 16.4 to 29.8 billion. During this time period, there was a concomitant increase in the number of coupons redeemed by consumers. In fact, during 1974, 65% of American households redeemed coupons [16].

Several factors account for the emergence of consumer deals as an important part of the marketing mix.[1] First, as economic conditions deteriorated in the early seventies, consumers became more value-oriented in their consumption choices. Deals provided an appropriate means for the marketer to deliver value and at the same time improve liquidity. Second, in the face of greater consumer deliberation as well as economic pressures, retailers became more selective about the products and brands they would stock. Deals constituted an effective way for manufacturers to gain trade concessions with respect to shelf facings, displays, and tie-in advertising. Third, the declining efficiency of advertising, accelerated by ever-increasing production costs, media costs, media clutter, and government control, appeared to make deals a relatively efficient means of attracting and maintaining customers [cf. 2, 5].

Despite the emergence of dealing as an important tactical device, several issues have not been resolved unequivocally. The purpose of this article is to address two important questions pertaining to the effects of deals on brand choice.

1 *What is the effect of a consumer deal on brand switching?* The literature suggests that dealing is related inversely to brand loyalty [14, 15, 22]. However, the extent to which this is the case for different types of deals has not been investigated. The question of whether the dealing-brand loyalty relationship previously reported is maintained for different types of deals is examined in the present study.

2 *What is the effect of deal retraction on subsequent loyalty to the dealt brand?* In accord with self-perception theory, evidence reported in the literature indicates that the presentation of an economic incentive contiguous with purchase results in less loyalty to the dealt brand when the economic incentive is subsequently retracted than would have been achieved if no incentive had been offered initially [4, 8, 17]. However, the investigations on which this finding is based have focused on only one dimension of the incentives—their monetary value. The effort which a consumer must expend to redeem a deal also may mediate the effect of deal retraction

[1]For a detailed discussion of the factors that account for the growth of dealing activity, see [20]

*Joe A Dodson and Brian Sternthal are Assistant Professors of Marketing, Northwestern University Alice M Tybout is Assistant Professor of Marketing and Transportation, Northwestern University The authors thank John Hauser for his comments on drafts of this manuscript.

Journal of Marketing Research
Vol XV (February 1978), 72-81

on subsequent brand loyalty. In fact, social psychological research indicates that the greater the effort an individual expends to engage in a behavior, the more likely he is to conclude that he likes the behavior and the more likely he is to persist at it [1, 9]. Thus, monetary incentive and effort to redeem a deal seem likely to have opposite effects on loyalty after deal retraction.

In the present study, a variety of frequently used consumer deals which differ in terms of magnitude of the incentive and effort required for redemption are examined to permit identification of the effects of deal retraction on brand switching. In addition, the impact of retracting deals that are commonly used to promote consumer packaged goods is investigated to determine the validity of self-perception theory predictions in everyday consumption settings.

These issues are examined in the context of two product categories, margarine and flour, and for three types of deals—media-distributed coupons, cents-off marked, and package coupons.[2] To place the study in perspective and to provide a rationale for the hypotheses tested, the literature relevant to dealing is reviewed.

LITERATURE AND HYPOTHESES

Three areas of inquiry have been of concern with respect to the dealing phenomenon. One involves identification of the individual differences that correlate with deal proneness. These studies typically have shown that individual difference factors account for less than 10% of the variance in deal activity, whether personality [14], socioeconomic [14], social psychological [15], or purchasing characteristics [15] serve as predictors. Moreover, even when a particular characteristic has been shown to be related to dealing, there are discrepancies between studies with regard to the nature of that relationship. For example, though Stockman [19] and Webster [22] both observed that the age of the consumer was related to dealing activity, Stockman reported that the relationship was negative whereas Webster found the relationship to be positive.

A second area of inquiry relates to the impact of deals on brand loyalty. In contrast to the findings on the individual difference correlates of deal proneness, which have marginal value for the marketing strategist, the limited data pertaining to the impact of deals on brand loyalty are very salient. They suggest that dealing is related inversely to brand loyalty [13, 15, 22]; deals induce consumers to switch brands.

This result is expected on the basis of economic utility theory. According to this formulation, deals serve as economic incentives that enhance the utility of a brand, thus attracting former purchasers of other brands. Furthermore, one can argue that the extent to which a particular deal stimulates switching depends on the economic value of the deal; deals having relatively high economic value (e.g., media-distributed coupons, see Table 1) are expected to have greater utility and induce more switching than ones having relatively low economic value (e.g., cents-off marked deals, Table 1). The accuracy of these predictions is examined in this study.

A third group of studies have examined the effect of deal retraction on brand loyalty. Using a field experimental paradigm, Doob et al. [8] introduced new brands of inexpensive, frequently purchased consumer products in experimental stores at a discounted price and in comparable control stores at the regular (competitive) price. After a nine-day introductory period the discounts were retracted in the experimental stores, thus equalizing the prices charged at experimental and control stores. The effect of these manipulations on aggregate sales was observed over a 20-week period. As was expected on the basis of economic utility theory, the experimental stores outsold the control stores during the discount period. However, when the discount was retracted this advantage was lost. In fact, by the end of the 20-week observation period, total sales in the control stores were greater than those in the experimental stores.

The Doob et al. finding suggests that purchasing on a deal undermines the likelihood of repurchase when the deal is retracted. However, because aggregate sales served as the unit of analysis, it was not possible to determine the effect of the deal on individual consumers. A field experiment reported by Scott [17], where the individual was the unit of analysis, clarifies this issue. She offered different amounts of incentive (e.g., free, half price, full price) to stimulate trial of a weekly newspaper and found that increasing the incentive tended to enhance the likelihood of accepting a two-week trial offer. However, very substantial incentives (free trial) undermined the likelihood of subscribing to the paper when the incentive was retracted after the two-week trial period. In fact, significantly more people subscribed in the half price condition than subscribed in the no trial control, whereas the difference in subscription between full price condition and no trial condition was nonsignificant. Similar results were reported by Bogart et al. [4].

Considered together the experimental studies provide support for the economic utility theory prediction that incentives enhance the likelihood of purchase behavior. In contrast, the observation that the retrac-

[2]These three types of deals were selected because they account for 99% of the deals redeemed in the two product categories being investigated. Media-distributed coupons are ones a consumer redeems by clipping them from a newspaper or magazine, or ones received through the mail. Cents-off marked deals are price reductions marked on the package. Package coupons are in or on the package, and the consumer must purchase the brand in order to redeem the coupon. Descriptive data on each of these deals are presented in Table 1.

tion of substantial incentives reduces the likelihood of behavioral persistence in relation to the retraction of small incentives, or not offering an incentive, cannot be explained readily by economic utility theory. A strict interpretation of economic utility theory implies that retraction of an incentive will cause the utility of a brand to fall to its pre-incentive level, not below it.

The observed effect of deal retraction on behavioral persistence can be explained by self-perception theory [3]. According to this formulation, individuals examine their own behavior and the circumstances in which that behavior occurs as a basis for determining their attitude toward an object. More specifically, the theory suggests that individuals who make purchases on deals, or when some other purchase incentive is offered, will be uncertain whether their behavior is attributable to a liking for the purchased product (i.e., an internal cause) or a desire to take advantage of the incentive (i.e., an external cause). Thus, retracting an incentive reduces the likelihood of repurchase because an important reason for the previous behavior, the incentive, is no longer present. In contrast, when purchase occurs in the absence of any incentive, it is likely to be attributed to a liking for the product (i.e., an internal cause) and this inferred positive attitude will direct future behavior, increasing the probability of repurchase.

Self-perception theory is used in the present study to predict the effect of deal retraction. Its selection is guided by two factors. First, the theory orders the effects of deal retraction reported in previous studies. Second, there is convincing evidence for the tenets of this theory beyond that pertaining to the effects of deal retraction. According to the self-perception formulation, to the extent that individuals attribute their behavior to internal causes, such behavior serves as a basis for directing their subsequent action. In a manner consistent with this proposition, studies conducted under the rubric of foot-in-the-door have found that compliance with a small initial request increases the intention to comply [10, 18] and actual compliance [12] with a subsequent large request relative to a no-initial-request situation. Furthermore, failure to comply with an initial request reduces the likelihood of subsequent compliance [18]. Self-perception theory also predicts that the presence of an external cause for a behavior undermines attribution to internal causes and thus reduces the probability that the behavior will persist when the external causes are removed. Support for this assertion emerges from experiments in which high source credibility rather than incentives such as deals serves as an external cause for behavior. In these investigations, it has been observed that performance of a behavior advocated by a highly credible source induced less favorable attitudes [6] and less subsequent compliant behavior [21] than when behavior was performed initially in response to a low credibility source.

In sum, self-perception theory orders the effects of deal retraction on repurchase and the effects of behavior on subsequent behavior in a variety of nondeal contexts. To elaborate the predictions made by self-perception theory with respect to the effects of deal retraction on subsequent brand loyalty, deals must be categorized according to the cues they provide the consumers about their motivation for purchasing the dealt brand. When individuals purchase on a deal requiring moderate effort to redeem, which has substantial economic value (e.g., media-distributed coupon), it is expected that they will attribute brand selection to the deal. ("Why did I go to the effort to redeem this coupon? Because of its economic value.") As a result, self-perception theory predicts that when the deal is retracted people who had switched brands to take advantage of the deal will have less motivation to repurchase the brand than if no deal had been offered.[3] In addition, individuals who had purchased the brand prior to the deal now will attribute the brand purchase to the deal and will be less likely to be brand loyal when the deal is retracted than if no deal had been offered.

A similar line of reasoning can be used to predict the effects of deal retraction on brand loyalty for other types of deals. If a deal requiring little effort and having low economic value is redeemed (e.g., cents-off marked), self-perception theory predicts that deal retraction will undermine loyalty in relation to a situation in which no deal is offered. In contrast, redemption of a deal which involves substantial effort and has low economic value (e.g., package coupons) is expected to enhance loyalty after the deal is retracted in relation to not offering a deal. In this case, the theory predicts that people are likely to observe that they exerted much effort to redeem the coupon despite the low incentive and to conclude that they really must like the dealt brand. These predictions are supported by research demonstrating that there is a greater likelihood of behavioral persistence if individuals have performed a behavior without sufficient justification for doing so than if there was sufficient justification [1, 9].

In summary, the present study centers on determining the impact of a variety of consumer deal types on repeat purchase and the external validity of self-perception theory in predicting the effect of deal retraction on subsequent loyalty to a previously dealt brand. More specifically, the extent to which six

[3]This prediction is based on the assumption that the brand purchased on a deal is not perceived to be superior to alternative brands. The product categories selected for study were believed to be consistent with this assumption.

empirically derived hypotheses are supported is investigated. On the basis of economic utility theory it is predicted that:

- H_1: The likelihood of switching to a brand when it is offered on a deal is significantly greater than when it is not offered on a deal.
- H_2: The likelihood of switching to a brand when it is offered on a media-distributed coupon deal is significantly greater than when it is offered on a cents-off or package coupon deal.

The effects of retracting a deal on brand choice are predicted by self-perception theory. In accord with this formulation and experimental evidence it is predicted that:

- H_3. Media-distributed coupons and cents-off deals will result in significantly reduced loyalty once these deals are retracted relative to a situation in which no deal is offered.
- H_4: Package coupons will result in significantly increased loyalty once retracted relative to a situation in which no deal is offered.
- H_5: The retraction of a media-distributed coupon will reduce loyalty to a greater extent than the retraction of a cents-off deal or a package coupon.
- H_6: The retraction of a cents-off deal will reduce loyalty to a greater extent than the retraction of a package coupon.

THE DATA

The data base for this study consisted of a subsample of households that participated in the *Chicago Tribune* Consumer Panel between 1963 and 1970. The 459 families selected for analyses were ones that had, during each year of the study, purchased at least one of a set of nine products.[4] The two product categories selected for this study were margarine and all-purpose flour.

Selection of two product categories allows cross-product validation of the findings. The selection of margarine and flour was based on two considerations. First, the brand alternatives available in each of these product categories are relatively homogeneous. This fact is important not only because brand homogeneity characterizes most consumer packaged goods, but also because significant differences between brands would likely swamp the effect of deals, which is a focal concern in this study. Second, margarine and flour represent product categories involving significantly different patterns of consumption. The *Chicago Tribune* data indicate that margarine is purchased relatively frequently (average family interpurchase interval is 36 days), whereas flour is not (average family interpurchase interval is 97 days); the proportion of margarine purchases made on a deal is relatively high (7%), whereas the proportion of flour purchases made on a deal is lower (4.5%). Thus, if the same pattern of findings is obtained across these distinct product categories, it is also likely to be obtained for other low priced, homogeneous consumer packaged goods.

The three types of deals selected for investigation, media-distributed coupons, cents-off marked, and package coupons, accounted for 99% of the deals redeemed in both the margarine and flour product categories. The descriptive data on the characteristics of each deal type are presented in Table 1. Particularly noteworthy is the fact that media-distributed coupons provide the largest incentive—a 20% discount on the average selling price of margarine and a 31% discount on the average selling price of flour. Also of interest is the observation that for both product categories, cents-off deals were redeemed most often, followed by media-distributed coupons and package coupons. The latter finding probably reflects both the frequency of offering each deal and the effort required for deal redemption.

[4]These products include cereal, coffee, concentrated fruit juice, detergent, flour, headache remedies, margarine, shampoo, and toothpaste See [7] for a more complete description of the data used.

Table 1
DEAL TYPE, DEAL VALUE, AND DEAL REDEMPTION FREQUENCY FOR MARGARINE AND FLOUR

	Product category					
	Margarine			*Flour*		
	Deal value			*Deal value*		
Deal type	*Average saving ($/lb)*	*Average saving as a % of average selling price*	*% of total number of deals redeemed*	*Average saving ($/lb)*	*Average saving as a % of average selling price*	*% of total number of deals redeemed*
Media-distributed	$0.07	20	41	$0.18	31	13
Cents-off	0.01	3	57	0.07	12 6	76
Package coupon	0.03	9	1	0 06	10	10

Table 2

PROBABILITY OF SWITCHING BRANDS GIVEN A DEAL, SPECIFIC TYPE OF DEAL, AND NO DEAL FOR MARGARINE AND FLOUR

Probability of switching brands	*Margarine*		*Flour*	
Given a deal	.530[a]	(n = 4,102)	.511[a]	(n = 704)
Media-distributed coupon	.653[a,b]	(n = 1,691)	.823[a,b]	(n = 98)
Cents-off marked	.444[a]	(n = 2,374)	.483[c]	(n = 528)
Package coupon	.405	(n = 37)	.321[c]	(n = 78)
Given no deal	.396	(n = 57,474)	.431	(n = 16,307)

[a]Significantly different than no deal, $p < .01$

[b]Significantly different than cents-off marked and package coupon, $p < .01$.

[c]Significantly different than no deal, $p < .05$.

RESULTS

Effect of Dealing on Brand Switching[5]

The major finding in the extant dealing literature is that dealing is related positively to brand switching [13, 15, 22]. In the present investigation, an attempt was made to replicate this finding by examining the probability of switching brands given a deal in relation to the probability of switching without a deal.[6]. As Table 2 indicates, the probability of switching is significantly greater when a deal is involved for both margarine (Z = 16.75, $p<.001$) and flour (Z = 4.21, $p<.01$). Thus H_1 is supported.[7]

It would be consistent with previous findings to conclude that deals adversely affect brand loyalty. However, further analysis of the data suggests that this conclusion lacks precision. Specifically, by examining the effect of particular types of deals, one observes that not all deals are related to a reduction in loyalty. For both margarine and flour, media-distributed coupons and to a lesser extent cents-off package decrease the likelihood of a repeat purchase (Table 2). In contrast, package coupons either reduce switching in comparison with no deal (in the case of flour) or at least do not enhance the likelihood of switching (in the case of margarine). The likelihood of switching brands of flour, given a package coupon, is significantly less than if no deal was offered (Z = 1.96, $p < .05$).

In sum, the data suggest that media-distributed coupons are particularly effective in obtaining brand trial. Cents-off package deals also promote brand switching, although to a lesser extent than media-distributed coupons (margarine, Z = 13.06, $p < .01$; flour, Z = 6.18, $p < .01$). In contrast, package coupons enhance or maintain the likelihood of a repeat purchase. These findings are consistent with H_2.

Effects of Deal Retraction on Subsequent Brand Loyalty

For this analysis, series of three consecutive purchases were examined. As Table 3 illustrates, in the deal transactions (media-distributed coupon, cents-off package, and package coupon), the three consecutive purchases examined involved a purchase made on a deal which was preceded and followed by purchases involving no deal. Purchase sequences in which two or more consecutive purchases involved a deal were excluded from the analysis to avoid confounding the effects of deal retraction. In the no-deal comparison, none of the three purchases involved deals. Further, purchases were classified according to whether they involved brand switching or brand repurchase. *Switching transactions* were ones in which individuals changed the brand they purchased from the first to second purchase occasion, whereas *loyalty transactions* were ones in which the same brand was purchased on both of these occasions (Table 3).

To determine the effect of a deal retraction on subsequent brand repurchase, the proportion of purchases in which individuals remained loyal to the brand previously purchased on a deal was compared with the proportion of purchases in which individuals remained loyal to the brand previously purchased without a deal (i.e., a comparison of the proportion of third-occasion purchases of brand B in the deal transaction with the proportion of third-occasion purchases of brand B in the no-deal comparison, Table 3). This test was performed for switching transactions as well

[5]Loyalty has taken on a variety of meanings in the literature. In this report it is defined operationally as the probability that two sequential purchases of a product will be for the same brand. The related concept, switching, is operationally defined as 1-minus loyalty.

[6]Throughout this study, the unit of analysis is successive transactions, irrespective of the length of time between these transactions. Thus, the brand people bought when they next purchased was used to measure brand loyalty This procedure minimized the likelihood that stocking up in response to a deal confounded brand loyalty

[7]Because testing the differences in the probability of switching in the various deal conditions in comparison with the no-deal condition as well as between deal conditions involved multiple comparisons, the likelihood of observing a significant difference increases. To mitigate capitalizing on chance, all Z tests were corrected for the rise in the protection level attributable to multiple comparisons (In the present case, Z = 4.21 for flour is actually significant at $p < .001$ if not corrected.)

Table 3
PROCEDURE FOR TESTING EFFECT OF DEAL RETRACTION ON SUBSEQUENT LOYALTY TO DEALT BRAND FOR SWITCHING AND LOYALTY TRANSACTIONS

	Deal transaction			*No deal comparison*		
Purchase occasion	1	2	3	1	2	3
Transaction type	No deal	Deal	No deal	No deal	No deal	No deal
Switching transaction	A	B	A, B or other	A	B	A, B or other
Loyalty transaction	B	B	A, B or other	B	B	A, B or other

as for loyalty transactions, for each type of deal and each product category.

Media-distributed coupon. Because media-distributed coupons require only moderate effort to redeem and have substantial economic value, it was predicted, on the basis of self-perception theory, that people would attribute their purchase to the deal. Consequently, those who purchased a brand on a media-distributed coupon were expected to be less loyal to that brand after the deal was retracted than people whose previous transaction did not involve a deal (H_3).

The data are consistent with the self-perception prediction. For margarine switching transactions (i.e., people switched brands from purchase occasion 1 to purchase occasion 2), it was found that people who had switched brands to redeem a media-distributed coupon were less likely to repurchase that brand after the coupon was retracted than people in the no-deal comparison who had switched previously without an incentive (Table 4). The same findings emerged for flour. In addition, for both margarine and flour, it was observed that the repurchase behavior of individuals involved in loyalty transactions was undermined by deal retraction. Individuals who used a media-distributed coupon to purchase a brand that they had purchased previously were significantly less loyal to that brand after the deal was retracted than those in the no-deal comparison whose two previous purchases of a brand were not made on a deal (Table 4).

Cents-off marked price. A cents-off deal is one in which the incentive is substantial *relative* to the effort required to redeem it. Thus, it was expected on the basis of self-perception theory that the loyalty to a brand purchased on a cents-off deal would be undermined by the incentive; people purchasing a brand on a cents-off deal would be less likely to repurchase it when the deal was retracted than those initially purchasing without the benefit of a deal.

As expected (H_3), individuals who switched brands to take advantage of a cents-off deal were less likely to repurchase that brand on their next purchase occasion than those in the no-deal comparison who previously switched without an incentive. Although this effect was observed for both margarine and flour, it reached conventional levels of statistical significance only for margarine (Table 5). Further, people who had purchased a brand and then repurchased it on a cents-off deal were less loyal to that brand after the deal was retracted than those who purchased it without an incentive, regardless of whether the product category was margarine or flour (Table 5).

Table 4
EFFECTS OF A MEDIA-DISTRIBUTED COUPON ON SUBSEQUENT SWITCHING RELATIVE TO NO DEAL FOR MARGARINE AND FLOUR, CATEGORIZED BY SWITCHING AND LOYALTY TRANSACTIONS

Transaction type	*Product category*	*Probability of repeat purchase of brand*: *Deal transactions*	*Probability of repeat purchase of brand*: *No-deal comparison*	*Z score for deal-no deal comparison*
Switching	Margarine	13% (n = 671)	28% (n = 23,794)	$Z = 8.55^a$
	Flour	16% (n = 58)	36% (n = 6,478)	$Z = 3\ 17^b$
Loyalty	Margarine	51% (n = 164)	77% (n = 29,253)	$Z = 7.86^a$
	Flour	44% (n = 9)	74% (n = 8,848)	$Z = 2.05^b$

[a]Significant at 01 level.
[b]Significant at 05 level

Table 5

EFFECTS OF CENTS-OFF PACKAGE ON SUBSEQUENT SWITCHING RELATIVE TO NO DEAL FOR MARGARINE AND FLOUR, CATEGORIZED BY SWITCHING AND LOYALTY TRANSACTIONS

		Probability of repeat purchase		Z score for deal-no deal comparison
Transaction type	*Product category*	*Deal transactions*	*No-deal comparison*	
Switching	Margarine	13% (n = 649)	28% (n = 23,794)	Z = 8.41[a]
	Flour	34% (n = 187)	36% (n = 6,478)	Z = .56
Loyalty	Margarine	62% (n = 189)	77% (n = 29,253)	Z = 4 86[a]
	Flour	62% (n = 149)	74% (n = 8,848)	Z = 4 46[a]

[a]Significant at 05 level

Package coupon.[8] The package coupon requires substantial effort to redeem in comparison with cents-off deals and has relatively low economic value. It was predicted that individuals who redeemed this type of deal would be likely to attribute their behavior to a positive disposition toward the brand purchased and therefore would be more loyal to the brand after the package coupon deal was retracted than when no deal motivated purchase (H_4).

For both product categories, the data indicate that individuals who purchased a brand and then repurchased it using a package coupon were as likely to repurchase that brand after the deal was retracted as those who purchased the brand without any incentive (Table 6). Thus, though the package coupon did not strengthen loyalty when it was retracted, it also did not undermine repurchase of the dealt brand under loyalty transactions (as was the case for media-distributed coupons and cents-off deals). However, given the small number of transactions involved in this analysis, this finding is best viewed as an empirically based hypothesis rather than a conclusion.

[8]Switching transactions for package coupons were excluded from the analysis because they lacked ecological validity To be included in the switching transactions package coupon category, an individual would have had to purchase the brand offering the package coupon, then purchase some other brand before redeeming the coupon. Such a procedure would involve more than the three transactions being investigated here Furthermore, very few transactions fit this category (14 for margarine and 19 for flour)

Effect of Deal Retraction on Brand Loyalty: Interdeal Comparisons

To determine the relative effects of retracting media-distributed coupons, cents-off deals, and package coupons, contrasts of the repeat purchase for each of the deal types were made (Table 7).[9] In general, the pattern of results is consistent with the self-perception theory predictions (H_5 and H_6). As expected, retraction of media-distributed coupons tended to undermine repeat purchasing to a greater extent than did retraction of cents-off coupons for flour switching transactions ($Z = 2.65, p < .05$) and both margarine and flour loyalty transactions (margarine, $Z = 2.08$, $p < .05$; flour, $Z = 1.08, p = .29$). Furthermore, under loyalty transactions, the likelihood of repeat purchase was lower after retraction of a media-distributed coupon than after retraction of a package coupon (margarine, $Z = 1.54$, $p = .12$; flour, $Z = 1.56, p = .12$) and the likelihood of repeat purchase was lower after retraction of a cents-off coupon than after retraction of a package coupon (margarine, $Z = 1.05$, $p = .30$; flour, $Z = 1.01, p = .32$). In the latter cases, the contrasts probably did not reach conventional levels of statistical significance because of the small number of transactions for several of the deal types. Finally, one result was counter to expectations. Although it was anticipated that media-distributed coupons

[9]In instances where multiple comparisons were made with a deal condition, the α level was corrected by the procedure described in footnote 7.

Table 6

EFFECTS OF PACKAGE COUPON DEAL ON SUBSEQUENT SWITCHING RELATIVE TO NO DEAL FOR MARGARINE AND FLOUR LOYALTY TRANSACTIONS

		Probability of repeat purchase		Z score for deal-no deal comparison
Transaction type	*Product category*	*Deal transaction*	*No-deal comparison*	
Loyalty	Margarine	83% (n = 6)	77% (n = 29,253)	Z = – 35
	Flour	72% (n = 29)	74% (n = 8,848)	Z = 24

Table 7

RELATIVE EFFECTS OF RETRACTING MEDIA-DISTRIBUTED COUPONS, CENTS-OFF DEALS, AND PACKAGE COUPONS ON SUBSEQUENT BRAND LOYALTY FOR MARGARINE AND FLOUR

		Probability of brand loyalty		
Transaction type	*Product category*	*Media-distributed coupons*	*Cents-off mailed*	*Package coupons*
Switching	Margarine	13% (n = 671)	13% (n = 649)	
	Flour	16%[a] (n = 58)	34% (n = 187)	
Loyalty	Margarine	51%[a] (n = 164)	62% (n = 189)	83% (n = 6)
	Flour	44% (n = 9)	62% (n = 149)	72% (n = 29)

[a]Significantly different from cents-off, $p < .05$

would result in less loyalty when retracted than cents-off deals, there was no difference in loyalty after retraction for these two types of deals under margarine switching transactions ($Z = 0.0$).

IMPLICATIONS AND DISCUSSION

Three major findings emerge from the investigation. First, as has been reported in previous studies, offering a deal was found to enhance brand switching. However, this relationship was not obtained for all types of deals. Media-distributed coupons induced substantial switching, cents-off deals somewhat less switching, and package coupons either decreased or did not affect brand switching. Second, the retraction of a deal had a significant effect on the incidence of brand repeat purchasing. Retraction of media-distributed coupons undermined repeat purchasing among persons who had switched to take advantage of the deal (i.e., switching transactions) as well as those who had purchased the brand before the deal (i.e., loyalty transactions). Similarly, retraction of a cents-off deal undermined the repeat purchasing of individuals who were involved in both switching (though not significantly for flour) and loyalty transactions. Retraction of package coupons served to maintain the loyalty of persons who had purchased the brand before coupon redemption. Third, the media-distributed coupons undermined repeat purchasing to a greater extent than either cents-off deals or package coupons, whereas cents-off deals undermined repeat purchasing to a greater extent than package coupons. However, only the tendency of media-distributed coupons to undermine repeat purchasing to a greater extent than cents-off coupons reached conventional levels of significance.

These data imply that certain types of deals are likely to be appropriate given particular objectives with regard to the management of demand. Media-distributed coupons are particularly useful to induce brand switching. However, because they also are associated with very substantial undermining of repeat purchase when retracted, they are appropriate only if consumers perceive the dealt brand to be superior to competing brands on attributes relevant to purchase choice. In such situations, the attrition in loyalty after the retraction of media-distributed coupons observed for very similar brands in the present data is less likely to occur. If the objective is to attract purchasers of other brands, and the focal brand does not dominate competing brands on some attribute relevant to consumer purchase, cents-off marked deals appear to be an attractive alternative. This type of deal induces switching to the dealt brand. It also tends to induce relatively more repeat purchasing after the deal is retracted than do media-distributed coupons. Finally, if the objective is to maintain the current franchise, package coupons are appropriate. They not only stimulate repeat brand purchase, but also result in repeat purchasing after the deal is retracted among persons who had purchased the brand before the deal.

On the basis of the data reported in this study, it might also seem reasonable to conclude that retraction of media-distributed coupons and cents-off deals has an adverse effect on demand for the dealt brand. However, this conclusion is unwarranted. Although in relation to a no-deal comparison, retraction of media-distributed coupons and cents-off deals reduced the loyalty of both people who switched to redeem these deals and those who redeem them by repurchasing the same brand, the overall effect of the deals on *demand* for dealt brands is not addressed in the present data. Indeed, media-distributed coupons and cents-off deals may facilitate gaining retailer support for the brand in terms of both shelf facings and tie-in advertising. In turn, this increased retailer support may serve to attract new customers to the product category or to reduce the manufacturer's cost of reaching the present franchise. Thus, in the long run, deals may stimulate demand or increase the manufacturer's efficiency in reaching customers, despite the fact that they may also undermine loyalty upon retraction.

From a theoretical perspective, the data provide additional evidence for the efficacy of economic utility theory in ordering the effects of deals on brand switching. Brand switching increased as the magnitude of the incentive associated with the deal increased. In addition, the data support the external validity of self-perception theory in marketing settings. Self-perception theory orders the effects of deal retraction on repeat purchase. In accord with the theory, the retraction of both high economic value, moderate effort, media-distributed coupons and moderate economic value, low effort, cents-off deals resulted in significantly less loyalty than when no deal was offered (with the exception of switching transactions for flour involving cents-off deals where the effect was in the predicted direction but nonsignificant). The retraction of low economic value, high effort, package coupons did not undermine loyalty in relation to no deal.[10] Support for the theory also obtains from the finding that retraction of media-distributed coupons resulted in less loyalty than retraction of either cents-off deals or package coupons.

Although self-perception theory appears to be the most reasonable explanation for the effects of deal retraction, the efficacy of this theory requires further investigation. Indeed, in the attempt to assess the applicability of self-perception theory to everyday consumption behavior, it was not possible to rule out competing explanations for the observed effects of deal retraction. Moreover, in previous experimental studies of deal retraction, the external validity of the findings is problematic. Thus research is needed which minimizes threats to both internal and external validity. It might entail an experiment in which deals varying in economic value and effort to redeem serve as independent variables. Within this context, it would be useful to employ a longitudinal design so that the persistence of deal retraction effects on brand choice could be monitored. Kuehn and Rohloff [11] have suggested how the linear learning model might be used to measure the persistence effect mathematically.

CONCLUSION

In sum, the data presented suggest that self-perception theory and economic utility theory provide complementary explanations of the effects of consumer deals on brand switching. Economic utility theory orders the effects of deals on brand switching in situations where the salient cue on which a brand decision is predicated is an economic variable, that is, when an individual is offered a deal. However, when the economic cue is confounded by the presence of noneconomic cues (such as an individual's previous behavior and the circumstances in which it occurred) as is the case when deals are retracted, self-perception theory provides an explanation for the observed effects.

[10]It was predicted that retraction of package coupons would actually strengthen loyalty in relation to no deal. The observed result, that package coupons merely maintained loyalty, is probably attributable to low incidence of package coupon redemption for both flour and margarine product categories.

REFERENCES

1. Aronson, E. and J. Carlsmith. "Effect of the Severity of Threat on the Devaluation of Forbidden Behavior," *Journal of Abnormal and Social Psychology,* 66 (1963), 584-8.
2. Banks, S. "Trends Affecting the Implementation of Advertising and Promotion," *Journal of Marketing,* 37 (January 1973), 19–28.
3. Bem, D. "Self-Perception Theory," *in* L. Berkowitz, ed. *Advances in Experimental Social Psychology.* New York: Academic Press, 1972, 1–62.
4. Bogart, K., A. Loeb, and I. Rutman. "Behavioral Consequences of Cognitive Dissonance," paper read at Eastern Psychological Association Meeting, 1969.
5. Brown, R. "Sales Response to Promotions and Advertising," *Journal of Advertising Research,* 14 (August 1974), 33–8.
6. Dholakia, R. and B. Sternthal. "Highly Credible Sources: Persuasive Facilitators or Persuasive Liabilities?" *Journal of Consumer Research,* (March 1977), 223–32.
7. Dodson. J. "An Empirical Examination of Buyer Behavior: Individual and Brand Analysis," unpublished doctoral dissertation, Purdue University, 1975.
8. Doob, A., J. Carlsmith, J. Freedman, T. Landauer, and S. Tom. "Effect of Initial Selling Price on Subsequent Sales," *Journal of Personality and Social Psychology,* 11 (1969), 345–50.
9. Freedman, J. "Long-term Behavioral Effects of Cognitive Dissonance," *Journal of Experimental Social Psychology,* 1 (1965), 145–55.
10. ——— and S. Fraser. "Compliance Without Pressure: The Foot-in-the-Door Technique," *Journal of Personality and Social Psychology,* 4 (August 1966), 195–202.
11. Kuehn, A. A. and A. C. Rohloff. "Consumer Response to Promotions," *in* P. J. Robinson, ed. *Promotional Decisions Using Mathematical Models.* Boston: Allyn and Bacon, Inc., 1967, 45–145.
12. Pliner, P., H. Hart, J. Kohl, and D. Saari. "Compliance Without Pressure: Some Further Data on the Foot-in-the-Door Technique," *Journal of Experimental Social Psychology,* 10 (January 1974), 17–22.
13. Massy, W. and R. Frank. "Short Term Price and Dealing Effects in Selected Market Segments," *Journal of Marketing Research,* 2 (May 1965), 175–85.
14. ———, ———, and T. Lodahl. *Purchasing Behavior and Personal Attributes.* Philadelphia: University of Pennsylvania Press, 1968.
15. Montgomery, D. "Consumer Characteristics Associated with Dealing: An Empirical Example," *Journal of Marketing Research,* 8 (February 1971), 118–20.
16. *The Nielsen Researcher.* "A New Look at Coupons," No. 1, 1976, 8.
17. Scott, C. "Effects of Trial and Incentives on Repeat Purchase Behavior," *Journal of Marketing Research,* 13 (August 1976), 263–9.
18. Snyder, M. and M. Cunningham "To Comply or Not Comply: Testing the Self-Perception Explanation of the

Foot-in-the-Door Phenomenon," *Journal of Personality and Social Psychology,* 31 (January 1975), 64–7.

19. Stockman, L. "The Influence of Consumer Deals on Urban Household Purchases of Butter, Margarine, Vegetable Shortening, and Salad and Cooking Oils in Metropolitan Chicago," *in* F. Bass, ed., *The Frontiers of Marketing Thought and Science.* Chicago: American Marketing Association, 1957, 241–6.
20. Strang, R. A. "Sales Promotion—Fast Growth, Faulty Management," *Harvard Business Review,* 54 (July–August 1976), 115–24.
21. Tybout, A. "The Effects of Source Credibility and Behavior Modification Strategy on Enrollment in a Health Care Plan," unpublished doctoral dissertation, Northwestern University, 1975.
22. Webster, F. "The 'Deal-Prone' Consumer," *Journal of Marketing Research,* 2 (May 1965), 186–9.