

An Examination of Deal Proneness Across Sales Promotion Types: A Consumer Segmentation Perspective

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This research examines if there are consumer segments that have a propensity to be deal prone in general and/or segments that reflect a proneness to deals at some more specific level (e.g., a segment reflecting a propensity to respond to price promotions but not nonprice promotions, a specific coupon prone segment, a rebate prone segment). Analyses using multi-item scales assessing consumers' proneness to eight different types of sales promotion indicate the existence of a consumer segment that reflects a generalized deal proneness across deal types. These segment-based findings are validated by relating segment membership to deal-responsive behaviors assessed in a natural field setting. Significant differences between the consumer segments are shown across eleven dependent measures. Given the objective of reaching deal prone consumers in an efficient manner, these results suggest that usage of a broad variety of promotion types may not be necessary to achieve this goal.

Sales promotions have constituted an increasing portion of the promotional budgets for packaged goods manufacturers in recent years. One survey found that packaged goods manufacturers' spending on consumer sales promotions now exceeds that spent on advertising and that firms average using more than eight different types of consumer sales promotion (Donnelley, 1994). Despite this increase in the use and variety of sales promotions, much of the research on consumer response to promotion techniques has examined only one or a few different types of promotions. However, many of these studies generalize their findings to "deals," "deal proneness," and/or deal prone consumers in general (cf. Blattberg and Neslin, 1990, pp. 74-76).

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In contrast, recent research has examined the "domain specificity" of the deal proneness construct and concluded that the deal proneness construct is best conceptualized at a deal-type specific level (e.g., coupon proneness, rebate proneness) as opposed to being conceptualized at a general level (Lichtenstein, Netemeyer, and Burton, 1995). This conclusion was based on: (1) confirmatory factor analyses showing a model consistent with a deal-specific conceptualization of deal proneness fit the data better than did a model based on a generalized conceptualization, and (2) hierarchical regressions showing that deal-specific measures explained significant amounts of variance in deal-related behaviors after accounting for variance explained by a generalized measure of deal proneness. These analyses focused on relationships between the latent deal prone constructs (e.g., coupon proneness, sale proneness), and relations between the latent deal prone constructs and deal behaviors (e.g., coupon proneness and coupon-redemption behavior).

In contrast to these more theoretical issues pertaining to the construct validity of alternative conceptualizations of "deal proneness" (Lichtenstein et al., 1995), questions more pertinent to promotion planning and tactical decisions concern proneness toward different types of deals for specific segments of consumers. The objective of this paper is to examine whether there is a segment of consumers that is consistently "prone" to deals across different sales promotion types or, given some conceptual differences across deal types, there are consumer segments that exist at a more deal-specific level.

This segmentation issue is relevant to firms that employ multiple types of consumer sales promotions and are interested in more effectively targeting their promotions at specific consumer segments. Tactical questions involving the use of different types of deals by a segment have some similarities to the development of advertising schedules that focus on reach (i.e., the percentage of consumers exposed to an ad) and frequency (i.e., the number of times the consumer is exposed to the ad). For example, if consumers are prone only to specific deal types (e.g., a coupon prone segment; a display prone segment), to obtain effective reach among these consumers it would be necessary for companies to use many different sales promotion techniques, each targeted at a different segment. However, if there is overlap in proneness so that a consumer segment is prone across different deal types, it becomes more efficient to reach these consumers using a less diverse set of promotional vehicles. Given that packaged goods manufacturers average use of more than eight types of sales promotion, and firms' use of new types of promotions has been increasing recently (Donnelley, 1994), such questions are highly relevant to retailers and marketers. Thus, this research serves to increase our understanding of the relationships between deal types, and offers some practical implications for increasing promotional efficiency that should interest marketing managers. These issues are increasing in importance due to marketers' concern with better integration of marketing communications and the development of data base systems for more accurate targeting of promotions at consumers (Berry et al., 1994; Shermach, 1995).

This research differs in several ways from prior studies that have used scanner panel data to examine segmentation-related questions for sales promotions (Henderson, 1987; Schneider and Currim, 1991). First, scanner panel studies infer a consumer proneness from purchase behaviors. In this study consumers' proneness toward deal types are conceptualized as unobservable, individual difference constructs that are made operational independent of purchase behavior. Any purchase *behavior* obviously may be motivated by multiple constructs (cf. Peterson, Albaum, and Beltramini, 1985), and inferring a proneness from behav-

ior does not account for the fact that many unobservable traits and situational variables may influence purchase behavior (Blattberg and Neslin, 1990; Lichtenstein et al., 1990). In this study, (1) multi-item measures are used to assess proneness to each of eight sales promotion types (coupon proneness, display proneness), (2) these proneness measures are then employed as the basis for determining segments of consumers, and (3) relationships between proneness segments and marketplace purchase behaviors are then assessed.

Also, most of the scanner-based studies have employed a relatively small number of deal types and only a few product classes (e.g., coffee, yogurt) measured at the household level. Such restrictions are generally a function of the available information on scanner tapes. Our methodology allows for assessment of a greater number of deal proneness types and examines purchases across product classes by an individual consumer rather than focusing on only a single or limited number of categories. Therefore, this research examines consumer segmentation questions for eight deal proneness types using a methodological approach that offers somewhat greater generalizability than previous scanner panel studies.

THREE PERSPECTIVES FOR DEAL PRONE SEGMENTS

A review of the deal literature finds researchers who believe that: (1) consumers are either deal prone or not on a deal-specific basis (e.g., a coupon prone consumer segment, a sale prone consumer segment), (2) consumers are either deal prone or not in general (i.e., a deal prone segment, a promotion insensitive segment), and (3) consumer segments align with proneness to certain types of deals, but not others (e.g., a price-oriented promotion segment). These three perspectives are briefly reviewed and alternative propositions are offered.

Regarding the first of these three perspectives (i.e., segments based on specific deal types), Blattberg and Neslin (1990) contend that consumer behaviors may be related to differing response sensitivities across types of promotions, thus suggesting a need to distinguish among consumer response to type of deal. For example, correlates of display proneness may be different from those of a proneness to coupons. A proneness toward products on display may be positively associated with impulsiveness while for coupon proneness (which demands out-of-store behavior to find and collect coupons), this relationship seems less likely.

Consistent with this perspective, Henderson (1987) contends that an undifferentiated view of consumers with respect to promotional attitudes and responses seems both naive and inconsistent with empirical evidence that suggests that sensitivities to promotions differ across consumers and promotional types. Using scanner panel data, Mayhew and Winer (1992) presented results showing one segment of households that was more likely to use coupons, but less likely to respond to sale prices than a second household segment. This rationale suggests that differences in deal type lead to varying deal sensitivities across groups of consumers. It follows that segmentation should be performed on a deal specific basis.

P_{ALT1}: *Given different sensitivities to sales promotion types, the market should be segmented according to consumer proneness to each deal type (a coupon prone segment, a rebate prone segment, etc.).*

This perspective is in direct contrast to the vast number of studies that have measured consumer response to a single deal type, but then have proceeded to draw conclusions regarding consumer deal proneness in general (see Blattberg and Neslin (1990, pp. 74-76) for a review). Additionally, many of the early studies on consumer sales promotions used diary panel data that reported purchases made “on deal” without signifying what type of deal (e.g., products on sale, coupons). The assumption inherent in this perspective is that there is some underlying characteristic that leads consumers to be prone, or not prone, to deals in general. For example, some consumers may view themselves as “expert” shoppers, and such self-perceptions may be positively related to a proneness toward deals in general. This view suggests that consumers favorably predisposed to one type of deal are, on average, more likely to be favorably predisposed to other deal types. This perspective also implies that there is sufficient similarity across types of promotions to justify targeting a single deal prone segment of consumers that would be more likely than others to respond to promotions of all types.

P_{ALT2}: *There is sufficient similarity across sales promotion types to justify segmenting the consumer market across different deal types (a general ‘deal prone’ segment, a ‘deal insensitive’ segment).*

A third group of researchers have suggested a “middle” position between these two perspectives. For example, Schneider and Currim (1991) dichotomize deal prone consumers into “active” and “passive” deal types. They view active deal prone consumers as more likely to engage in the relatively intensive search required to respond to promotions like coupons or feature sales. In contrast, passive deal prone consumers are more likely to respond to promotions such as in-store displays where there is minimal search that is limited to the in-store environment. Schneider and Currim (1991) found some support for their hypothesis that consumers have a tendency to act *primarily* in an active or passive manner, but few consumers behave equally in both manners. One-half of their sample acted in either a purely active or purely passive deal prone manner, with little overlap.

Another manner in which sales promotions can be classified is by price and nonprice-oriented sales promotions (Shimp, 1990). Coupons, sales, rebates, and cents-off promotions, for example, result in lower purchase prices while other deals (e.g., contests/sweepstakes, free gift with purchase, displays) do not offer a lower purchase price. Consumers who are more price conscious should be differentially sensitive to price-oriented sales promotions (cf. Blattberg and Neslin, 1990; Lichtenstein et al., 1990). Hence, there is rationale to believe that deal prone segments of consumers may exist based on a price-nonprice promotion criterion.¹

P_{ALT3}: *Given similarities for some types of sales promotion (i.e., price-based versus nonprice deals, active versus passive deals), the consumer market may be segmented according to proneness to some deal types but not others (e.g., price-based and non-price based deal prone segments, “active” and “passive” deal prone segments).*

METHOD

Pretest and Measures of Deal Types

Conceptual definitions for eight separate consumer deal proneness types initially were developed. The eight deal types included proneness toward coupons, sales, cents-off, buy-one-get-one-free, free-gift-with-purchase, end-of-aisle displays, rebates/refunds, and contests/sweepstakes. These types were chosen because they were (1) among those most commonly employed (Blattberg and Neslin, 1990) and (2) diverse in terms of possible deal-type categorizations (i.e., active-passive, price-nonprice). Separate multi-item scales were developed for each deal proneness type. The procedures used to develop these scales closely adhered to procedures recommended in the scale development literature (Churchill, 1979; Gerbing and Anderson, 1988). These procedures included construct definition, item development and purification, and assessment of dimensionality, discriminant validity, and internal consistency via confirmatory factor analysis.

A pretest of 92 items developed to assess proneness to each of the eight deal types was conducted using 341 nonstudent consumers. Based on pretest results, some items were deleted and others were modified for the main study. In the main study, 49 items were used to assess the eight proneness types (ranging between 5 and 7 items per deal type). All items were seven-point Likert-type scales anchored by "Strongly Disagree" and "Strongly Agree." Sample items for these multi-item proneness measures are reported in the Appendix. (The full set of items is available on request from the first author.) Table 1 shows the number of items used, coefficient alpha, scale mean, standard deviation, and Pearson correlations for each construct.

Various tests of dimensionality and discriminant validity were supportive of these measures. For each of the constructs, one factor models were used to assess item-to-factor loadings and fit for each of the eight deal type measures using LISREL. Item to factor loadings ranged from .53 to .90 ($p < .01$ for each), and Bentler's corrected fit index ranged from .85 to .99. Variance extracted estimates ranged from .53 to .59 for each of the eight scales, and coefficient alpha reliabilities, shown in Table 1, ranged from .86 to .91. The pattern of loadings from a factor analysis of all 49 items also was supportive of the measures. These results support the internal consistency of the measures. The variance extracted estimates for each possible pair of factors relative to the phi correlation between the factors (Fornell and Larcker, 1981) indicated that the variance extracted estimates were all greater than the square of the phi correlations. This test supports discriminant validity among the eight proneness measures.

Procedures for the Main Study

In the main study, shoppers were contacted by trained interviewers as they were exiting from two grocery stores (belonging to the same chain) and asked for their participation in a university-sponsored project concerning shopping attitudes and how people shop. Shop-

TABLE 1

**Means, Standard Deviations, Reliabilities and
Correlations for Deal Proneness Types**

Deal Type	Number of Items	Coefficient		Means ^a	Standard Deviations ^a			
		α						
Buy-One-Get One-Free	6	.86		28.7 (4.8)	7.5 (1.3)			
Sales	6	.88		23.4 (3.9)	8.2 (1.4)			
Coupons	5	.88		19.2 (3.8)	7.7 (1.5)			
Cents-off	7	.90		25.1 (3.6)	9.0 (1.3)			
Free Gift	6	.91		17.6 (2.9)	8.2 (1.4)			
In-Store Displays	7	.89		18.8 (2.7)	8.0 (1.1)			
Rebates	6	.86		15.8 (2.6)	7.2 (1.2)			
Contests/ Sweepstakes	6	.90		12.6 (2.1)	7.1 (1.2)			
<i>Correlations^b</i>								
	1	2	3	4	5	6	7	8
(1) Buy-One- Get-One-Free	(.39)							
(2) Sales	.52	(.40)						
(3) Coupons	.40	.40	(.34)					
(4) Cents-off	.48	.52	.44	(.41)				
(5) Free Gift	.46	.41	.33	.50	(.41)			
(6) In-Store Displays	.29	.37	.16	.30	.39	(.30)		
(7) Rebates	.36	.32	.37	.42	.43	.34	(.37)	
(8) Contest/ Sweepstakes	.20	.23	.25	.20	.35	.26	.35	(.26)

Notes: ^a Average scale scores (means/number of scale items) and their standard deviations are shown in (). For these average scale scores, differences between means of 0.15 or greater are statistically significant, given this sample size.
^b $p < .001$ for all correlations; the average correlations between the specific deal type and the other seven deals are shown on the diagonal.

pers responding positively were asked several brief questions (e.g., did they look at the weekly store sale ad before shopping), and were asked to provide interviewers with their scanner-based grocery receipts. Those agreeing to participate also were given a self-administered survey (to be answered at home and returned in a postage paid return envelope) and coupons from a local bakery that served as an inducement for participation. The take-home survey included (1) the multi-item measures of the eight deal-specific proneness types, (2) a seven-place scale pertaining to the frequency of grocery store coupon-redemption behavior and two open-ended questions which assessed the frequency of acting on rebate/refund and contests/sweepstakes offers, and (3) socioeconomic and demographic measures.

One thousand surveys were distributed in the grocery stores, and 582 (58.2%) of these surveys were returned. For these respondents for whom both surveys and grocery store receipts were available, the median age category was 35-44, the median annual household income category was \$35,000 to \$49,999, 76% were female, and 59% were married.

Data from returned surveys were merged with the scanner-based purchase behavior information coded from the grocery store receipt. Information derived from the receipt included: (1) the quantity and face values of coupons redeemed, (2) number, amount spent, and amount saved from purchasing products promoted in the weekly sale ad, (3) number and amount spent on end-of-aisle display purchases, and (4) the total amount spent at the

store. Thus, multi-item measures of the proneness constructs were available from the surveys and were used to address the segmentation-related propositions. The purchase behavior information taken from the grocery store receipts was then used to assess the predictive ability of these segment-based results.

RESULTS

Findings Pertaining to Consumer Segmentation

The focal research question concerns the propositions drawn from the literature on alternative segmentation schemes (e.g., is there evidence to support consumer segments that are, in general, either deal prone or not deal prone or should consumers be segmented on some more deal-specific basis?) To address this question, an inductively-based cluster analysis was performed on the average item scores for the eight deal-type measures to see if results would (1) support *segments of consumers* consistent with *any* of the deal proneness alternatives (e.g., generalized, intermediate, or deal-specific), and (2) if so, assess relationships between consumer deal prone segments and marketplace behaviors and demographics (cf. Henderson, 1988; Schneider and Currim, 1991).²

Given competing rationale for the number of segments (clusters) that might exist, we first examined five different cluster solutions by extracting two through six clusters using SPSS QUICK CLUSTER (Punj and Stewart, 1983).³ We initially looked at the F-ratios and amount of variance explained for each clustering variable for each of the five cluster solutions. While it is not recommended to use these F-values for hypothesis testing (since the clusters have been chosen to maximize the differences among cases in different clusters), they can be used for descriptive purposes and as a criterion for comparison of alternative cluster solutions (Punj and Stewart, 1983). The largest F-ratios were found for the two-cluster solution, the variance explained (eta-square) by the two clusters ranged from .15 to .36 for the eight proneness measures, the rate of decrease in F-ratios (i.e., the "elbow") appeared to occur between the 2 and 3 cluster solution, and this solution was easily interpreted (cf. Hair et al., 1995; Henderson, 1987). Thus, these results support a two-cluster solution, and the three-cluster solution was also very interpretable. Because the "elbow" occurred between the two- and three-cluster solution, and both of these solutions appear interpretable, for completeness, both solutions are provided in Table 2.⁴

The two cluster solution provides strong evidence of a generalized deal proneness segment (cluster 1, $n = 256$, 49% of the sample) and a segment that can be labeled as "promotion insensitives" (cluster 2, $n = 268$, 51% of the sample). Across all eight proneness measures, cluster one had higher (average item) mean scores than did cluster two. All F-values associated with differences between the clustering variables were large.

Similar results were obtained for the three cluster solution. There was a generalized (high) deal-prone segment ($n = 128$, 24% of the sample), an intermediate deal proneness group ($n = 261$, 50%), and a promotion insensitive segment ($n = 135$, 26%). F-values were all significant. In follow-up contrasts comparing means between the three groups, t-values

TABLE 2

Cluster Analysis Means and ANOVA F-Values For Deal Proneness Types

Deal Type	Two Cluster Solution		F Values ^a	Three Cluster Solution			F Values ^a
	1 Deal Prone (n=256)	2 Promotion Insensitives (n=268)		1 High DP (n=128)	2 Inter- mediate DP (n=261)	3 Promotion Insensitives (n=135)	
Buy-One Get One-Free	5.4	4.1	198.1	5.6	5.1	3.5	164.7
Sales	4.7	3.1	283.9	5.0	4.1	2.5	184.4
Coupons	4.6	3.0	207.7	5.2	3.9	2.4	171.6
Cents-Off Proneness	4.3	2.8	298.1	4.5	3.8	2.3	172.1
Free Gift	3.7	2.1	281.1	4.3	2.9	1.8	179.3
In-Store Displays	3.2	2.2	112.6	3.4	2.8	1.9	68.4
Rebate Proneness	3.2	2.0	184.8	3.8	2.5	1.7	166.4
Contests/ Sweepstakes	2.5	1.6	90.0	3.2	1.9	1.5	115.1

Note: ^aF-Values are all significant ($p < .001$).

were significant ($p < .01$) in 24 out of 24 tests. The pattern of results for both the two and three cluster solutions offers strongest support for Proposition_{ALT2} and suggests that there is sufficient overlap between consumer proneness to types of deals to justify targeting a generalized deal prone segment.

Validation Results Using Marketplace Behaviors

To test the nomological validity of these results, membership for the two- and three-cluster solutions was retained and used as an independent variable to predict the marketplace behaviors pertaining to deal responsiveness. These deal-responsive dependent variables included measures pertaining to coupon usage, sale item purchases, response to contests/sweepstakes and rebate offers, and end-of-aisle display purchases. Because the marketplace behaviors are significantly correlated with each other, MANCOVA's (using total amount spent at the store as a covariate) were performed initially to help control the Type I error rate. Univariate ANOVA's were then used as a follow-up for validation tests involving these marketplace dependent variables. The Wilks' Λ associated with the two cluster solution was .82 ($F = 10.7, p < .001$). Means and F-values for the follow-up univariate tests are shown in Table 3. For all dependent variables, the values for the generalized deal prone segment are greater than those for the promotion insensitive segment (F-values ranging from 8.5 to 56.5, $p < .01$ for all ten variables).

Similar results were obtained for the three cluster solution that resulted in high, intermediate, and low deal proneness segments. The Wilks' Λ was .70 ($F = 9.7, p < .001$), and fol-

TABLE 3

Means and ANOVA F-Values for Cluster Membership Across Marketplace Behavior/Responses

Dependent Variable	Two Cluster Solution			Three Cluster Solution			F-Value
	1	2		1	2	3	
	Deal Prone	Promotion Insensitives		High DP	Intermediate DP	Promotion Insensitives	
Coupon redemption frequency (self report)	4.70	3.33		5.15	4.21	2.62	53.3 ^a
Quantity of coupons redeemed	1.18	0.64		1.60	0.82	0.48	9.1 ^a
Dollar value of coupons redeemed	\$0.57	\$0.28		\$0.78	\$0.37	\$0.21	10.9 ^a
Quantity of sale items purchased	1.74	0.90		1.93	1.33	0.76	9.1 ^a
Money spent on sale items	\$1.53	\$0.90		\$1.75	\$1.22	\$0.73	10.6 ^a
Money saved on sale items	\$0.75	\$0.42		\$0.82	\$0.67	\$0.20	8.8 ^c
Contest/Sweepstakes frequency	1.83	0.59		2.75	0.88	0.48	39.5 ^a
Rebate frequency	3.11	1.47		3.97	2.05	1.17	20.1 ^a
Quantity of end-of-aisle purchase	1.40	0.81		1.37	1.18	0.70	4.4 ^c
Money spent on end-of-aisle purchases	\$1.21	\$0.77		\$1.12	\$1.07	\$0.70	3.8 ^c
Percent looking at weekly sale ad	44 %	32 %		45 %	42 %	23 %	16.3 ^{a,d}

Notes: ^ap < .001; ^bp < .01; ^cp < .025; ^dχ² value associated with cross-tabulation of variables.

low-up univariate tests across the 10 dependent variables were all significant ($p < .01$ for all variables except quantity and money spent on end-of-aisle display items ($p < .025$)).

The last dependent variable shown in Table 3 is the dichotomous measure assessing whether the respondent reported looking at the weekly sale ad prior to shopping (i.e., yes or no). The crosstabulation of these variable with cluster membership was significant for both the two and three cluster analyses, and in both instances the percentage for the high deal prone group exceeded those of the other segments.

Demographic Comparisons

Many prior deal proneness studies have attempted to profile the deal prone consumer in terms of demographics, but results have been somewhat inconsistent (Blattberg and Neslin, 1990). For example, different studies have reported that younger, middle-aged or older consumers tend to be more deal prone, and variables such as education that are significant in some studies are not significant in others. (See Blattberg and Neslin (1990, pp. 72-77) for details on such findings.)

Given our examination of multiple types of promotions, the above results suggesting a general deal prone segment, and past interest in demographics, we examined the relationship between cluster membership and respondents' age, household income, education, and gender. Independent tests for the four demographic variables showed a significant association for both age and education ($p < .01$ for each). Income and gender were nonsignificant. Based on the suggestion of a reviewer, we also performed two discriminant analyses using cluster membership (two or three groups) as the dependent variable and demographic variables as the predictors. In both analyses, the discriminant function was significant, and education and age were both significant predictors. Income and gender were again nonsignificant. Across all analyses, younger consumers and those with less education were more likely to be deal prone.

DISCUSSION

The objective of this paper is to assess whether consumers are prone to deals in general and/or prone to some types of deals, but not others. Drawing from the deal proneness literature, propositions concerning segment-based possibilities are offered, and multi-item measures of consumers' proneness to eight different types of sales promotions are derived. These are then employed as input variables to an inductively-based cluster analysis. The *between-person* nature of the distance-based cluster analysis addresses the segmentation-related question of whether proneness is sufficiently similar across deal types to warrant targeting different deal types at a generalized deal prone segment of consumers. The results of the cluster analyses reveal a consumer segment that is deal prone across various types, thus providing the strongest support for the second proposition. The two-cluster solution provides strong support for two segments of consumers, one sensitive across all deal types and

another relatively insensitive to sales promotions. For the two and three cluster solutions, deal prone segments are strongly related to the market behavior data. This strong support for the nomological validity of these segment-based findings should be of interest to sales promotion researchers and marketers employing sales promotions.

More specifically, we observe that firms are currently using more than eight different types of sales promotion and the types of sales promotion used are growing rapidly (Donnelley, 1994). Even recognizing different promotional goals across promotion types (e.g., sales to influence in-store decision-making, coupons to influence out-of-store decision-making), these results suggest that a limited number of deal types may achieve effective reach within the deal-sensitive segment. The implications for targeting promotions to achieve specified objectives should be relevant to the current interest of marketers in using integrated marketing communications and data base systems to increase the efficiency of consumer promotions (Berry et al., 1994; Shermach, 1995).

The findings and implications from this study extend prior scanner-data research because a larger number of sales promotions types are examined, the proneness types are conceptually and empirically distinct from deal-response behavior, and results stretch across product classes rather than focusing on a limited number of categories. Thus, this broader domain of promotion types examined across product categories enhances generalizability and offers results pertaining to the overlap of consumers' proneness that should be relevant to researchers and marketers concerned with sales promotions. For example, as shown in Table 1, while the eight deal-types proneness were all positively correlated, some deal types (e.g., contests/sweepstakes) appeared to be perceived as more atypical than others. In addition, marketers employing a variety of sales promotion types should note that consumer proneness levels reported in Tables 1 and 2 suggest higher levels of proneness for some deal types (e.g., buy-one-get-one-free offers) than others (contests/sweepstakes).

Based on confirmatory factor and hierarchical regression analyses, it has been recently argued that theoretically-based deal studies should differentiate between deal types (Lichtenstein et al., 1995). Differences in the ability of the deal-specific constructs to predict behaviors in their respective domains were reported (e.g., coupon proneness best predicted coupon-redemption behavior, sale proneness best predicted sale responsive behavior). Based on these results, Lichtenstein et al. (1995) recommend a domain-specific conceptualization of deal proneness for theory development and testing. We agree with this recommendation and the position of Blattberg and Neslin (1990) that some psychological antecedents or correlates may vary across types of deals, and future conceptual and theory-based empirical work should address such issues.

However, it should be noted that analyses of Lichtenstein et al. (1995) addressed the relationships between different constructs and *not* across different segments of consumers. When the deal proneness measures are used as clustering variables to assess similarities between consumers rather than relationships between constructs, results indicate a segment of consumers that reflects some level of deal proneness, and this deal proneness appears to generalize across deal types. Thus, when viewed from a promotion planning and management perspective, findings suggest that targeting a more limited number of promotions at a deal prone segment may be the most cost effective method to achieve reach among consumers who are generally prone to sales promotions.

Limitations and Future Research

Several limitations may restrict the generalizability of our findings. The data were obtained from shoppers at two grocery stores located in the same city. The education level of this sample was higher than average, and other idiosyncrasies may make these results atypical of other geographical markets. Our study addressed eight deal types based on both frequency of use and diversity, but there are other promotion types on which research could focus.

Also, marketplace behavior data were collected based on the receipt from a single grocery shopping trip. Use of behavior data collected over multiple grocery shopping encounters probably would yield stronger and more stable and reliable results. Unlike scanner panel studies, this methodology separates the unobservable proneness measure from the deal-responsive behavior measure, and as noted previously, this dual nature of the sources of data offer several advantages (e.g., breadth across product classes and deal types, measurement at the individual consumer rather than household level). However, scanner and other panel studies offer the advantage of purchase behavior data gathered over a significant time frame. The longitudinal nature of such data offers important information including consumer switching between brands (McAlister, 1987). We view future research that combines both survey-based measures with long-term purchase histories as needed. Such research would provide the opportunity to replicate the results reported here, examine issues related to switching and repeat purchase behavior, and assess the importance of situational variables that moderate the relationships between unobservable promotion proneness and deal-responsive purchase behavior.

This research did not attempt to address more theoretical aspects of deal proneness and deal behavior of recent interest to academic researchers. For example, a better understanding is needed for psychological mechanisms (e.g., price/value consciousness, impulsiveness, need for cognition, smart shopper self-perceptions) that may underlie proneness to specific types of deals and/or a generalized deal segment such as that found in this study. We hope that the issues raised in this study will stimulate further research in this important area.

APPENDIX**Cents-Off Proneness^a**

I am more likely to buy a brand if it has a cents-off deal on the label.

Compared to most people, I would say I have a positive attitude toward cents-off deals.

Free-Gift-with-Purchase Proneness

I enjoy buying products that come with a free gift.

Beyond the money I save, buying a brand that comes with a free gift gives me a sense of joy.

Buy-One-Get-One-Free Proneness

I have favorite brands, but if I see a "2 for 1" offer, I am more likely to buy that brand.

When I take advantage of a "buy-one-get-one-free" offer, I feel good.

End-of-Aisle Display Proneness

I am more likely to buy brands that are displayed at the end of the aisle.

End-of-aisle displays have influenced me to buy brands I normally would not buy.

Coupon Proneness

When I use coupons, I feel that I am getting a good deal.

I enjoy using coupons, regardless of the amount I save by doing so.

Rebate/Refund Proneness

Receiving cash rebates makes me feel good.

By the time you pay postage, mail-in cash rebates are *not* worth the hassle (reverse coded).

Contest/Sweepstakes Proneness

I feel compelled to respond to contest or sweepstake offers.

Manufacturers' contests and sweepstakes are fun to enter, even if I know I'll never win.

Sale Proneness

One should try to buy the brand that is on sale.

I am more likely to buy brands that are on sale.

Note: ^a All items were measured on seven point scales anchored by "Strongly Disagree" and "Strongly Agree."

NOTES

1. Other categorizations of deal types are possible. We address only these two intermediate types because (1) the active-passive classification has received some prior empirical support (Schneider and Currim, 1991), and (2) the most commonly cited benefit of sales promotion is price reduction.

2. These cluster analyses group similar respondents together based on squared Euclidian distances between cluster variates formed from the eight deal type scales. The use of distance measures between respondents to classify similar consumers together is a fundamental difference between cluster and regression or factor analyses which are based on relationships (i.e., correlations) between variables (Hair et al., 1995, pp. 423-424, 429-432).

3. Initial seed values for these nonhierarchical cluster analyses were based on the cluster centroids determined by a preliminary hierarchical clustering run using Ward's method, as recommended by a reviewer. Consistent mean level and F-value cluster results were obtained when other various user-specified initial seed values were supplied.

4. In the four cluster solution, a deal prone and a promotion insensitive segment again emerged (n 's = 95 and 135, respectively). For the five cluster solution, the deal prone segment began to fragment; a primary deal prone segment emerged that was highest on all deal types except contest/sweepstakes and display proneness, and a second segment was much higher in contest/sweepstakes proneness and somewhat higher in display proneness. In the six cluster solution, similar results were obtained with the exception that the primary deal prone segment included all deal types *except* contests. While a promotion insensitive segment that was low across all deal types emerged in all analyses, the structure of the "intermediate" clusters for these solutions was less clear and difficult to interpret.

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