

Consumer Issues In Coupon Usage: An Exploratory Analysis

Dr. Joseph Bonnici, Marketing, Bryant College
Dr. David P. Campbell, Marketing, Valdosta State University
Dr. William B. Fredenberger, Information Systems, Valdosta State University
Dr. Kathryn H. Hunnicutt, *deceased*

Abstract

This article investigates consumers' salient issues which influence their decisions for not using coupons. Questionnaire data are factor analyzed, and five underlying constructs are identified: embarrassment, forgetfulness, hassle, proneness to expire, and limited financial worth. In the face of such obstacles, marketers should be more proactive in addressing consumer concerns about the redemption process.

Introduction

Coupons have been used since at least the late nineteenth century (Babakus *et al.*, 1988) but very little coupon research about their use appeared until the late 1970's. A historical analysis shows that early sporadic articles on the topic gave way to a research stream in the late 1970's when articles by Dodson *et al.* (1976, 1978), Blattberg *et al.* (1977), Ward and Davis (1978) and Cotton and Babb (1978) sought to identify the deal-prone consumer in terms of demographic and behavioral segmentation variables.

Although the literature in the deal-proneness arena has evolved further, it still tends to be fragmented and inconsistent in terms of which demographic segments are most likely to use coupons (Blattberg *et al.* 1977; Hackleman and Duker, 1980; Reibstein and Traver, 1982; Mittal, 1994) and where and which coupons are most likely to be redeemed (*Direct Marketing*, 1993). Deal-proneness studies seem to be somewhat more consistent within the broader context of brand loyalty and brand switching topics. For example,

consumers who have bought the product on a regular basis in the past are more likely to respond favorably to the product's coupon promotions (Neslin *et al.*, 1985; Bawa and Shoemaker, 1987). Yet, even here, shades of contradictory results exist. For example, while Shoemaker and Tibrewala (1985) determined that an increase in coupons' face value is more likely to increase the stated redemption of nonbuyers, Krishna and Shoemaker (1992) found that higher face values influence nonbuyers' and buyers' redemptions alike.

Hecht (1953) identified coupons as a booster of short-term sales, and their limited potential to increase long-term sales was further confirmed by Klein (1981). Also, coupons seem to encourage brand switching, to accelerate new product trials, and to maintain loyalty in times of competitor activity (e.g., Nielsen, 1965; Varadarajan, 1984; Neslin *et al.* 1985; Chapman, 1986; Neslin and Clarke, 1987).

Although intrapersonal and interpersonal

variables may account for low redemption rates, there is very little coupon research which examines these variables. Montgomery's (1971) study of consumer characteristics associated with dealing emphasized psychological and sociological perspectives. Gardner and Strang (1983) explored the influence of coupon clubs and coupon trading activities. Shimp and Kavas (1984) researched coupon usage as a family- and friend-related behavior. Using the theory of reasoned action, they found that coupon usage is influenced by an interaction of the user's attitude towards coupons and the normative effect of family, spouse, friends and neighbors.

Opinion leadership and diffusion theory may also shed light on redemption rates. King and Summers (1970) found evidence of opinion leadership across a broad range of product categories. The influence of friends and neighbors could be especially important when the consumer is evaluating whether coupons should be used. Bloch (1986) and Feick and Price (1987) confirmed the impact of opinion leadership on shopping and product enjoyment behavior. Likewise, reticence toward coupon use was observed within the Hispanic community, where coupons were regarded as a poverty symbol; the community's ethnic pride discouraged their use (Fitch, 1986; Kaufman and Hernandez, 1990).

Methodology

The preceding discussion shows how the research stream evolved from its early disjointed start to a later analysis of consumer aspects associated with coupon redemption. However, as the research interest about coupons intensified, coupon redemption rates declined, especially in the last few years. While industry broadened its purpose for coupon promotions, moving beyond the original intent of inducing trial purchase of new products, the consumers' redemption rate failed to keep pace. There may be several beliefs and attitudes which explain the reluctance to use coupons. A factor analysis study would be ideal as an umbrella methodology of inquiry which would allow a broad analysis of the beliefs and attitudes. Such analysis would offer the opportunity to propose practitio-

ner-oriented solutions to the redemption problem without getting bogged down in any one narrow problem or its corresponding solution. The analysis would unravel different obstacles and as a consequence could lead to several creative solutions.

It was for this reason that the next step in this study, after taking into account the valuable suggestions raised in the literature, was to elicit the participation of several students as respondents in a factor analysis study. Students are an appropriate segment for such an analysis given that students are familiar with coupons. Clevenger *et al.* (1965) observed that both housewives and students registered similar factor loadings in their evaluative study. Sheth (1970), in questioning whether there are significant differences between the two groups in dissonance reduction behavior, observed a lot of similarities. Khera and Benson (1970) claimed that there is a lack of evidence against the use of students as respondents. Besides, the response rate in student samples is very high, and this reduces the possibility of nonobservation bias in the form of nonresponse error (Yu and Cooper, 1983; Wiseman and Billington, 1984).

Two focus groups were assembled on a New England university campus, and their monitored discussions were intentionally directed toward consumer problems with coupons. In addition, and separate from the focus groups, 43 subjects were asked to write down all the reasons for their aversion to coupons. Based on the recorded input and the literature cited in this paper, questionnaire items were assembled (Table 1). The items, each of which carried a 1 to 7 Likert scale ranging from "Agree" to "Disagree" respectively, were carefully constructed to avoid having prospective subjects respond in areas in which they had no consumer experience or knowledge. The questionnaires were then delivered to students on two East coast campuses, whose participation was solicited and rewarded as part of their final grade. The number of questionnaires handed back was 160, of which 158 contained enough data to proceed into the factor analysis stage. Factor analysis was used to identify the underlying factors which deter consumers from coupon redemption.

Table 1
Questionnaire Items

- Q1. Most food coupons are for products I don't buy.
 Q2. Couponed products are of low quality.
 Q3. Coupon usage does not reflect positively on one's status.
 Q4. Coupons are useful for trying new products.
 Q5. Coupons are cumbersome to collect.
 Q6. I forget to take coupons to the store.
 Q7. Most coupons expire quickly.
 Q8. Coupon discounts are not significant.
 Q9. Coupon savings are not worth the time spent on them.
 Q10. I do not need most couponed products.
 Q11. Couponed products are unlikely to be of high quality.
 Q12. Coupons are degrading to one's status.
 Q13. Most coupons are for new products.
 Q14. It's easy to misplace coupons.
 Q15. I forget to redeem coupons.
 Q16. Many coupons expire before redemption.
 Q17. Savings on coupons are not significant.
 Q18. I don't have the time to cut out coupons.
 Q19. Couponed products are unlikely to be in high demand.
 Q20. Coupons are associated with low quality products.
 Q21. It's embarrassing to use coupons.
 Q22. I hesitate to try new products through coupons.
 Q23. Coupons are a hassle.
 Q24. I forget coupons at home.
 Q25. Coupons expire fast.
 Q26. The amount saved on coupons isn't worth their use.
 Q27. It's time consuming to use coupons.

Analysis

The usable responses of 158 subjects in relation to the 27 variables, a ratio of approximately 5:1, was adequate for exploratory factor analysis (Tabachnick and Fidell, 1989; Hair *et al.*, 1992). Several guidelines were used throughout all principal component and common factor analyses iterations. First, missing values were imputed by using the regression analysis technique with two iterations. Second, the robust estimation parameter for controlling the weighing function was used in estimating the covariance matrix, set at 4.0 to eliminate the influence of outliers (Jackson, 1991). Third came a simple factor structure, one which

occurs when only a few variables correlate highly with each factor and only one factor correlates highly with each variable (Thurstone, 1947). This led to the heuristic for strength of factor loadings established by Comrey (1973), selecting .45 as the cutoff point. Variables with a loading ³.45 had to be significant at $p = .01$ (Hair *et al.*). The process described by Dillon and Goldstein (1984) and Hair *et al.* to conceptually evaluate the factor loadings was the final guideline.

In the process, the name for each variable was written in the left margin beside the variable numbers. Starting with the first variable on the first factor, there was a horizontal movement from left to right, to find the highest absolute significant loading for that variable on any factor, and circle it. These steps were repeated with the remaining variables. Then, starting again with the first variable on the first factor, the horizontal movement from left to right was repeated to find any significant loading for that variable on any factor and underlined it if it had not been circled in the previous step. These steps were repeated with the remaining variables. The purpose at this point was to evaluate the structure for simplicity.

Variables not circled for at least one factor were identified and evaluated for their overall contribution to the communality index. If they had low communality indices, they were eliminated in order to derive a new factor solution. Once a factor solution emerged where all variables had at least one significant loading on a factor, meaning was assigned to the pattern of factor loadings. Variables with higher loadings were considered more important in interpreting the factors. When a

variable loaded negatively on a factor it meant that an observation scoring high on this variable would score low on the factor, and vice versa. In other words, a negatively loading variable had a meaning opposite to that of the factor.

The correlation matrix had enough correlation to factor analyze according to the Bartlett Sphericity test which tests the null hypothesis that the correlation matrix is an identity matrix with all correlations equal to zero (Bartlett, 1950). This test is valid for large samples involving over 150 subjects (Tabachnick and Fidell, 1989) and therefore applied to the sample size under study. The measure for this test was the \log_e of the determinant of the correlation matrix. In this case, the test was significant ($C^2 = 1921.1$, $df = 406$, $p = 0.0$).

For the first analysis, principal components factor analysis was used with a varimax rotation to determine the number of factors with eigenvalues greater than 1.0 (Kaiser, 1960) instead of the more subjective scree graph (Catell, 1966). The use of eigenvalues to determine the number of factors is most reliable when the number of variables is between 20 and 50 (Hair, *et al.* 1992), as in this case. Nine factors had eigenvalues greater than 1.0. The nine factors for this sample size and the number of variables and exploratory factor analysis were therefore appropriate (Tabachnick and Fidell, 1989).

For the second analysis, common factor analysis was used with the principal axis extraction method and a varimax rotation. Nine factors were requested but only seven factors had eigenvalues greater than 1.0. This was not surprising given that the number of components with eigenvalues greater than 1 is usually somewhere between the number of variables divided by 3 and the number of variables divided by 5 (Hair, *et al.* 1992).

For the third analysis, the common factor analysis was repeated with a principal axis extraction method with varimax rotation. Seven factors were requested as suggested by the second analysis. The eigenvalue table, factor loadings, and communalities are on Table 2. Only one question,

#26, cross-loaded. However, factors 6 and 7 appeared to be outlying factors, factors that were defined by only one or two variables with significant loadings (i.e., all other loadings were less than approximately 0.30, meaning that the shared variance with each variable was less than approximately 0.09). Such types of factors are potentially unreliable, and should be interpreted with caution or not at all (Mulaik, 1972; Harmon, 1967). These factors were dropped and five factors were used in the next step. Items 1, 10 and 26 were also dropped. Items 1 and 10 did not meet the loading cutoff of 3 .45; item 26 cross-loaded on factors 3 and 5. At this point the principal components analyses done at the first step was repeated to confirm the appropriateness of using five factors. Only five factors had eigenvalues exceeding 1.0.

For the fourth analysis, a principal factor extraction method was used for the remaining variables. The eigenvalues, factor loadings, and communalities are shown in Table 3. This last iteration produced a simple factor structure with strong loadings and no cross-loadings. The importance of each factor and the set of factors was evaluated by examining trace, percent of trace, and proportion of variance. Following the reading for trace, the percent of trace was obtained by dividing each factor's sum of squared loadings by the trace for the set of variables being analyzed. The result indicated the extent to which the factor solution accounted for the total common variance. The index was relatively low because the variables were quite different from each other. The proportion of variance was the proportion of the solution to the total variance. Table 3 shows that the proportion of variance, along with trace and percent of trace, indicated the adequacy of the factor solution.

Findings

Table 3 is set up in a way that the items which load on each factor are grouped together. The bold numbers in each factor column are those which load on a particular factor. It can be seen that the consumers' underlying salient issues are represented through five factors.

The first factor (*Q2, Q11, Q12, Q20,*

Table 2
Communalities and Squared Loadings for the
3rd Factor Analysis, the 2nd Common Factor Analysis

<i>Item</i>	<i>F 1</i>	<i>F 2</i>	<i>F 3</i>	<i>F 4</i>	<i>F 5</i>	<i>F 6</i>	<i>F 7</i>	<i>Commun.</i>
Q1	0.021	0.002	0.006	0.014	0.017	0.002	0.294	0.359
Q2	0.254	0.000	0.000	0.039	0.004	0.070	0.020	0.390
Q3	0.006	0.000	0.005	0.009	0.002	0.186	0.016	0.227
Q4	0.144	0.000	0.020	0.004	0.005	0.000	0.005	0.181
Q5	0.007	0.013	0.424	0.003	0.007	0.005	0.018	0.479
Q6	0.003	0.542	0.049	0.023	0.011	0.000	0.042	0.673
Q7	0.007	0.054	0.002	0.548	0.001	0.000	0.013	0.628
Q8	0.017	0.003	0.024	0.006	0.601	0.024	0.030	0.709
Q9	0.035	0.000	0.145	0.018	0.459	0.002	0.009	0.671
Q10	0.021	0.026	0.022	0.001	0.054	0.005	0.371	0.505
Q11	0.291	0.004	0.021	0.014	0.036	0.019	0.002	0.390
Q12	0.012	0.000	0.089	0.009	0.039	0.451	0.002	0.607
Q13	0.002	0.022	0.017	0.000	0.118	0.006	0.004	0.172
Q14	0.005	0.276	0.011	0.072	0.010	0.050	0.009	0.435
Q15	0.000	0.606	0.000	0.061	0.010	0.001	0.000	0.681
Q16	0.009	0.055	0.006	0.410	0.053	0.000	0.000	0.536
Q17	0.084	0.001	0.111	0.061	0.409	0.022	0.030	0.722
Q18	0.005	0.050	0.143	0.053	0.000	0.011	0.053	0.317
Q19	0.178	0.034	0.000	0.003	0.003	0.022	0.044	0.287
Q20	0.358	0.000	0.000	0.000	0.155	0.025	0.002	0.542
Q21	0.088	0.000	0.081	0.002	0.035	0.368	0.019	0.597
Q22	0.150	0.002	0.055	0.000	0.000	0.000	0.011	0.220
Q23	0.020	0.025	0.716	0.001	0.020	0.002	0.002	0.789
Q24	0.000	0.648	0.022	0.015	0.006	0.027	0.000	0.721
Q25	0.015	0.063	0.017	0.687	0.006	0.000	0.011	0.802
Q26	0.049	0.002	0.314	0.044	0.209	0.011	0.026	0.657
Q27	0.000	0.008	0.489	0.024	0.003	0.024	0.001	0.552

Q21) reveals that consumers perceive couponed products to be of low quality and feel embarrassed to use coupons in their shopping. The purchase of low quality goods is damaging to one's status, especially in a materialistic society. Purchasing such goods on the basis of a few-cents discount makes the buying experience even more humiliating to one's self-image. As one focus group subject observed, "It's like begging for a quarter or two at the cash register, with a scaled-down foodstamp."

ent sizes, they are difficult to stack in an orderly fashion. Besides, how should they be stacked together? By financial value? By product class? In order of expiration? The stores, on their part, do not guarantee that they will carry the couponed products. If they do, the products' size or weight may not correspond to the size or weight specified on the coupons. If the products happen to be available, their location within the store may not be immediately clear to the customer. Factor 3's statements clearly reveal that coupons are a time-

The second factor (Q6, Q14, Q15, Q24) captures the consumer's forgetfulness to use coupons, partly as a result of the delay between the scissoring-out of the coupons and the consumer's visit to the retail outlet. Coupons seem to be a casualty of the consumer's lack of a meticulously detailed shopping plan, falling outside the realm of habitual buying. Promoting different products, as they usually do, coupons fail to be associated with specific products in the repetitive buying process. Hence, they are forgotten and misplaced.

The third factor (Q5, Q23, Q27) reveals another negative aspect about coupons. They are a hassle. The consumer must decide which coupons to select and which to ignore. The savings' magnitude against the products' estimated cost is unclear. Tearing out FSI coupons is a cumbersome process. Since coupons come in differ-

Table 3
Factor Loadings and Communalities for
the Final, Principle Factor, Iteration

<i>Item</i>	<i>F 1</i>	<i>F 2</i>	<i>F 3</i>	<i>F 4</i>	<i>F 5</i>	<i>Commun.</i>
Q2	-.560	-.027	-.029	0.201	0.091	0.365
Q11	-.591	-.097	0.040	0.162	0.152	0.523
Q12	-.527	0.004	0.294	-.064	0.197	0.716
Q20	-.694	-.005	0.060	0.044	0.252	0.658
Q21	-.612	0.030	0.297	-.020	0.091	0.727
Q6	-.027	-.816	0.180	0.129	-.023	0.655
Q14	-.141	-.541	0.139	0.215	0.095	0.410
Q15	-.036	-.806	0.019	0.250	0.046	0.408
Q24	0.114	-.826	0.178	0.179	0.049	0.388
Q5	-.150	-.187	0.671	-.018	0.119	0.717
Q23	-.088	-.200	0.829	0.076	0.185	0.525
Q27	-.126	-.092	0.676	0.149	0.142	0.816
Q7	-.060	-.253	0.029	0.761	0.098	0.551
Q16	-.150	-.209	0.064	0.652	0.168	0.473
Q25	-.114	-.278	0.118	0.854	0.105	0.776
Q8	-.253	-.060	0.137	0.110	0.793	0.763
Q9	-.292	-.076	0.363	0.178	0.632	0.845
Q17	-.344	-.040	0.207	0.201	0.783	0.524
						<i>Fac. Sol.</i>
<i>Trace</i>	2.180	2.578	2.064	2.070	1.911	10.840
						<i>Total</i>
<i>% of Trace</i>	.200	.240	.190	.190	.180	1.000
<i>Proportion of Variance</i>						0.60

cashier's propensity to notice the expired date could leave an indelible, humiliating impression in the buyer's mind. The expiration problem is further reinforced by the retrieval of old coupons which have been forgotten or misplaced.

Although financial savings are supposed to emanate to the coupon user, their magnitude is questionable. As the fifth factor (*Q8, Q9, Q17*) shows, coupon discounts are perceived as being paltry and undeserving of the time spent on them. Each coupon's value only chips off somewhat from the shopping bill which the same couponed products help to inflate. Coupons are perceived as offering a low return for the hassles endured in the redemptive process.

Managerial Implications

Consumers' proneness to associate coupon redemption with low quality suggests that high status products should not use coupons as a promotional vehicle. A high-status image must be sustained

consuming, cumbersome and hassling process.

Another problem is that unearthed by the fourth factor (*Q7, Q16, Q25*). Coupons expire fast. The coupon's expiration date puts a limit on the consumer's delay in using the coupon: either the consumer buys by a preset date or else he or she will have to forego the promised discount. As coupons accumulate, they are forgotten and misplaced beyond redemption. At the cash register, a

through an integrated marketing mix where each element dovetails into the desired identity. Coupons do not befit a high end image and can potentially undermine the prestige brands they set out to promote.

In order to lessen a coupon user's embarrassment, marketers should consider other options. Rebates could be a superior alternative because they do not require a face-to-face contact in the ex-

change process. The buyer could mail the rebate and deposit the check he or she receives through a faceless paper pushing procedure. A second way would be to tie in coupon redemption with charity donations. The soft drink bottling company may donate a certain amount of money to a national charity for every coupon redeemed. Or it may donate the entire coupon value to charity instead of to the redeemer. Such a move would reflect to the credit of the altruistic redeemer, turning a selfish buying act into an altruistic act of concern for those less fortunate. A third way would be to thank coupon users for their participation. A thank you note for using coupons, whether on the coupon or on the cash receipts, further absolves users from any embarrassment they may have. It gives them an upbeat impression that couponed good manufacturers benefit as well in the process, a sort of win-win scenario for everyone involved.

To counteract misplacement, industry could establish standard sizes for coupons, akin to dollar bill and credit card sizes. This would make it easier to tuck coupons into a wallet, reducing the possibility that coupons would be forgotten behind at home. The nation's major clearinghouses should take a bold first step in this direction by spelling out specific sizes acceptable for FSI inserts. Such a move would also reduce the hassle that one goes through in stacking up coupons of various sizes.

There may be a limit to what industry can do to counteract consumers' impression that coupons expire fast. The increasing trend towards offering coupons next to where the targeted products are on the retail shelves encourages instant redemption. Other creative possibilities include a gradual reduction in the coupon's value over the months it takes to be redeemed, thus prodding the consumer to act quickly instead of procrastinating until about the expiration date. Such procrastination traditionally leads to forgetfulness, misplacement and eventually, disappointment. If a coupon is to have an expiration date, one should consider whether it is possible to select a date with a meaningful relationship to the product. This would reduce a buyer's impression that the expiration date is an arbitrary one. Thus, December 25, would be meaningful for egg nog or fruit cake coupons, and

late October would make sense for a packet of Halloween cookies. Such dates would also make it impossible for the coupons to be redeemed soon after the stipulated date, when the product's price may be at its lowest, below what it could otherwise bear in terms of coupon discounts.

The subjects complained that savings on coupons are not significant. After all, coupons' value is meant to be of such magnitude as to encourage buying behavior without jeopardizing the corporation's bottom line. Industry does not usually make money by giving it away. The increasing propensity to offer higher coupon face values conditional upon multiple and simultaneous purchases of the product is a promotional ploy which seeks to appease consumers while securing more sales. The same thing can be said about grocery stores' willingness to engage in conditional double-value coupon redemptions. Other ways to boost perceived savings for consumers might be the introduction of coupons which offer a percentage discount instead of a stipulated cents discount. A percentage discount would have a near perfect correlation with fluctuating prices, eliciting the image of a fair and honest relationship between coupon value and price.

Conclusion

Subjects in this study did not raise the fact that as freestanding inserts saturated the market over the years, coupon redemption rates declined. Neither did they seem to be aware that a large number of coupons are published with the direct intent to counter price-cut moves by the competition (*cf.* Sinisi 1993). Respondents were concerned with the relationship between the redemption experience and themselves, not with coupons as pieces on the competitive chessboard. Within a marketing concept environment, such self-orientation is justified. Yet, in its analysis of coupon usage, the marketing literature tends to be fixated with coupons as means to a competitive and financial end, at times reducing the redemption process to mere demographic variables. In so doing, the literature concludes, for example, that ethnic groups are less likely to respond favorably to coupons, and it misses the crux that such groups

are less likely to respond not because they are ethnic but because their particular concerns and their culture are overlooked in the promotional process.

The respondents were not informed that the average expiration dates have been shrinking throughout the early 1990's (Hume, 1993). Yet, the factor analysis indicated that that was one of the subjects' five main concerns. As early as 1984, the Grocery Manufacturers of America was asking its members to consider "eliminating expiration dates" (Food Marketing Institute, 1984). That several manufacturers still do the opposite reflects differing viewpoints within the industry.

Suggestions for Future Research

The five salient issues highlight areas worthy of further research, particularly because they are suggested by the consumers themselves. In two of these areas, proneness to expire and limited financial worth, there is evidence of methodological interest (e.g., Lichtenstein *et al.*, 1993; Inman and McAlister, 1994) possibly because the expiration period and the dollar value are relatively easy to measure. However, with regard to embarrassment, forgetfulness and the hassling experience within the redemption context, there seems to be more of a research block. These are pertinent areas worthy of research consideration.

As electronic coupon clearing and plastic identification cards gain further momentum in the redemptive process, the marketing research in this area will be more challenging and more time-compressed. In such a scenario, consumers' beliefs and attitudes will be increasingly critical if the ongoing electronic transformation is to play by their rules.

Finally, although there is evidence that students are acceptable surrogates for a broader-based audience (Clevenger *et al.*, 1965; Sheth, 1970), methodological prudence would suggest that future research should be more comprehensive in its selection of subjects in order to solidify further, or possibly amend, the results of this exploratory analysis. □

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