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AUTHOR Pokrywczynski, Jim
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ABSTRACT

To determine if coupon collecting has any influence on product information processing like brand awareness, and to understand better the coupon collecting process, an exploratory study examined the relationship between coupon-collecting behavior and brand awareness for the coupons collected. Subjects, 152 randomly chosen respondents from a Midwest city telephone directory, were asked about coupon-collecting behavior during a 7-day period. Results indicated that nearly three-fourths of respondents mentioned the brand they collected a coupon for as their top-of-mind brand for various product categories, suggesting that a relationship may exist between these factors. (One figure and four tables of data are included, and 31 references are appended.) (HS)

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Investigating the Relationship between Coupon Collecting
and Top-of-Mind Brand Awareness

by

Dr. Jim Pokrywczynski
Assistant Professor
College of Journalism
306 Johnston Hall
Marquette University
Milwaukee, WI 53233
414-224-3451

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Abstract

An exploratory study examines the relationship between coupon collecting behavior and brand awareness for the coupons collected. Several information processing theories are used to hypothesize the potential influences of coupon collecting on consumption.

The results show nearly three-fourths of respondents mentioned the brand they collected a coupon for as their top-of-mind brand for various product categories. These findings suggest that coupon collecting may provide some valuable insights when attempting to identify couponing's influences.

Introduction

Almost 253 billion coupons were distributed in 1988, an increase of more than 14%, according to industry clearinghouses (Coupon growth 1989). At the same time nearly 98% of U.S. households use coupons over the course of a year (Teinowitz 1989).

Yet less than 4% of coupons distributed are redeemed (Coupon growth 1989). This low redemption rate raises several interesting questions: What's happening to the rest of the coupons? Are they ignored? Are they collected and not used? What influence does the coupon collecting experience have on the consumer buying process? Few answers to these questions exist in the published literature.

Most of the research concerning couponing has focused either at the beginning or the end of the couponing process. At one extreme, studies compare the effectiveness of advertisements with and without coupons. Some studies have found no differences in consumers' attention, attitudes or intentions to purchase a product. (Bearden, Lichenstein and Teel 1984; Raju and Hastak 1983), while others have shown increases in consumer attention for ads that include coupons and other promotions (Strazewski 1986).

At the other extreme, studies look at the consequences of coupon redemption. For example, Dodson, Tybout and Sternthal (1978) showed couponing is positively related to

brand switching and negatively related to future purchase of the same brand. Many other studies (cited later) provide evidence of the long-term disadvantages of couponing, which has convinced a number of marketers to back away from this promotional activity (Fahey 1989).

However, there are two important flaws inherent in studies examining the consequences of coupon redemption. First, since redemption is so low, researchers are looking at a very small portion of the couponing process when evaluating couponing effectiveness. Second, the procedures and processes consumers go through before redeeming coupons may have enormous explanatory power for the influence of couponing.

Consumers who devote time and effort to clip and save coupons are likely to simultaneously evaluate their need for the product, the attractiveness of the offer, and future product need. The thought processes associated with collecting coupons may result in heightened levels of awareness and knowledge about the product, and predispose consumers attitudinally toward a product whether or not the coupon is redeemed. These effects are even more important in light of findings by Cobb and Hoyer (1985) that consumers with high levels of advertising recognition (and, one would assume, product information processing) engage in less in-store information processing and browsing. If coupon collectors experience heightened product information

processing prior to shopping, marketers may be able to use couponing to build brand awareness and shield a brand from in-store promotional efforts by the competition.

Several information processing theories may be useful in attempting to explain the influences that coupon collecting can have on brand awareness or brand attitudes.

Based on mere exposure theory (Zajonc 1968), multiple exposures to the brand name and offer through coupon handling are likely to increase brand awareness and improve attitudes toward the brand. Collecting, filing and sorting coupons before they are redeemed or discarded produce repeat exposures. Information on how respondents collect, file and sort coupons may help explain the influence of coupon collecting .

Cognitive dissonance theory (Festinger 1957) may be useful in explaining the influence of coupon collecting beyond the awareness stage of the hierarchy of effects. This theory suggests consumers who expend the effort to collect coupons will experience dissonance unless benefits from the effort are reaped. An expired coupon or failure to bring the appropriate coupon on a shopping trip may motivate an attitude shift regarding the brand to avoid dissonance. A positive attitude shift, personified by a consumer saying, "I like the product enough to buy it even without a coupon," may be less distasteful for consumers than trying to discount the effort involved in collecting the coupon.

Studies that identify or manipulate the effort involved in coupon collecting and measure brand attitudes and purchase behavior after a dissonance-arousing situation is presented (e.g., an expired coupon) are likely to explain the role of dissonance in couponing.

The purpose of this exploratory study was two-fold:

1) to determine if coupon collecting has any influence on product information processing like brand awareness, and 2) to better understand the coupon collecting process.

Past Research on Coupon Redemption

A positive relationship has been found between coupon redemption and a coupon's face value (Shoemaker and Tibrewala 1985). This relationship changed slightly when past purchase habits were considered, with monetary value carrying more weight for infrequent or non-purchasers of the brand.

Coupon value is also influential in predicting redemption rates for various coupon distribution methods (Reibstein and Traver 1982). Regression analysis showed that a one cent change in coupon value would lead to a corresponding change of .2% in redemption rates. Although this change seems miniscule, when projected to national redemption rates the impact would involve 17 million coupon redemptions.

Other coupon characteristics identified in the literature review by Reibstein and Traver (1982) as having

potential influence are: expiration date, newness of the product/brand, brand usually purchased and size of purchase required to satisfy the coupon's requirements. Knowledge of the relative importance of these criteria is necessary to understand the influence that coupon collection may have on the purchase decision process.

Salient attitudes toward couponing were identified by Shimp and Kavas (1984). Coupon use was more prevalent if the time and effort required to clip and redeem coupons seemed minimal, encouragement for couponing was received from significant others like a spouse, family members or friends, and feelings of thriftiness resulted from couponing.

The media used to distribute coupons vary considerably in terms of redemption rates (Ward and Davis 1978). Direct mail produces high redemption, magazine and newspaper coupon distribution achieve moderate redemption, while in/on package coupons are infrequently redeemed. Coupon collection behavior may provide a better explanation of why redemption rates vary across media. For example, direct mail coupons may be redeemed more often because they are easier to store and reference than coupons that must be torn from newspaper or magazine pages.

Certain demographic characteristics predominate among coupon redeemers. Blattberg et al (1978) found that deal proneness (including coupon use) was higher among consumers

in upper income brackets, larger households (but, with fewer children below 6 years old), who are non-working primary shoppers and who own their own cars and homes.

Method

In this study a random sample of respondents was asked about coupon collecting behavior during a 7-day period. Coupon collecting behavior was defined as those activities directly related to the acquisition of a coupon. Measures of such behavior focused on the number of coupons collected in a one-week period, the amount of time devoted to collection and the methods used to obtain coupons (e.g., criteria for collecting coupons, means of removing coupon from medium, etc.). Guidance in developing measures of coupon collection behavior was sought from studies that have identified important influences of coupon redemption (See Figure 1). Other measures tapped attitudes toward coupon collecting, sources relied on most for coupons and methods used for coupon storage and filing.

Respondents (n=152) were selected using an updated Midwest city telephone directory as a sampling frame. A systematic sampling procedure was used to choose telephone numbers and a "plus-one" procedure was used to improve sample representation (Landon and Banks 1977). Respondents were screened for two criteria: 1) primary grocery shopper in the home, and 2) collector of at least one coupon in the last 30 days. Ten contacts failed screen 1, and 26 failed

screen 2. Interviewers were graduate students who received course credit for a data collection exercise. They were instructed to attempt two callbacks of each telephone number. Surveys were conducted at various times over a one-week period during early November 1986.

Five-point Likert-type scales were used to measure attitudes about coupon collecting and the importance of several criteria when collecting coupons. The attitude scales were first analyzed using principal components analysis to identify underlying dimensions (Harman 1967). Analysis of the 11 items measuring attitudes about coupon collection produced a single factor (See Table 1). Two items, feelings of guilt when a coupon is not used and lack of family support for coupon collecting, loaded poorly on the factor and were dropped from further analysis. The remaining items were summed to produce a composite score of couponing attitudes. Reliability (alpha) for the 9 items was .92.

Principal components analysis of the 8 characteristics of coupons produced three factors (See Table 2). The first factor, "utility," included "type of product," "brand," "brand usually bought" and "dollar value of offer." The second factor, "motivation," included "expiration date" and "amount of effort needed to collect coupon." A third factor, "innovativeness," included the items "new product"

and "available in your store." Items on each factor were summed.

The influence of coupon collecting on top-of-mind brand awareness was measured in the following way. Early in the 20-minute interview, respondents were asked to name three products categories for which they collected the most coupons. Top-of-mind brand awareness was also recorded for these product categories.

Near the end of the interview, respondents were again asked about the three product categories mentioned earlier. This time, respondents were asked to report the brand for which a coupon had been collected in the past week. Eighteen percent of the time, no coupon had been collected in the last week for the product categories previously mentioned.

In between these two measurements, additional questions about couponing and media usage habits served as distracting elements in hopes of reducing the demand characteristics of the awareness measurement procedure (See Sudman and Bradburn 1982).

Results

Sample characteristics

Sample makeup closely resembled census data for the area in terms of age, household size and family income. (U.S. Government, 1980). Mean age for the sample was 44.6,

household size averaged 2.78 and median family household income was in the \$20-30,000 range (See Table 3).

Females outnumbered males more than 4 to 1 in the sample. However, this disproportion was likely caused by the screening questions (primary grocery shopper and coupon collected in last 30 days) rather than the sampling procedure.

On the average, respondents said they collected twice as many coupons as they redeemed on a weekly basis. Respondents on the average collected 20 coupons per week and redeemed a little over nine. Respondents averaged 23 minutes per week clipping coupons.

Top-of-mind awareness for coupon collectors

About 75% of (n=115) respondents collected a coupon for the same brand they mentioned in a top-of-mind brand awareness test for at least one product category. Of the 115 respondents, 28% collected a coupon for the same brand mentioned as top-of-mind in two product categories, while 17% matched brands for three different product categories. Considering that in some cases respondents did not collect a coupon during the 7-day period for one of the product categories tested, the influence of coupon collecting on top-of-mind awareness may be stronger than these results indicate.

Laundry soap brands were matched most often (n=58). Cereal brands were next (n=40) followed by coffee (n=29) and paper products (n=20).

Discriminating variables for coupon collecting's influence on brand awareness

The next logical step was to identify characteristics related to coupon collecting behavior or respondent characteristics that distinguished consumers who mentioned the same brand when asked about coupon collecting and top-of-mind awareness (Brand Matchers) from consumers who did not match brand mentions (Non-matchers). Discriminant analysis was used, with stepwise entering of variables based on discriminating power.

One immediate problem with using discriminant analysis on this sample was meeting the important assumption that equal covariances exist between groups (Klecka 1980). Since brand matchers outnumbered non-matchers more than 3 to 1 (e.g., 115 to 37), satisfying this assumption was difficult. Consequently, a subsample of matchers was selected using the random selection procedure built into the SPSS-X package. After eliminating respondents with missing values on one of the 11 discriminating variables, the final sample used to perform discriminant analysis was: 33 matchers, 29 non-matchers. The assumption of equal covariance was met.

The selection of discriminating variables was based on:
a) meeting the requirement of interval level measures for

discriminant analysis (See Klecka 1980, p. 11); and
b) variables identified in previous literature that
influence coupon redemption. Variables considered as
discriminators were: amount of coupon collecting per week;
amount of coupon redeeming per week; number of minutes per
week spent collecting coupons; "motivation" factor
concerning coupon characteristics; perceived organization of
coupon storage system; importance of two of most popular
media for distributing coupons (FSI's and direct mail); and
four demographics: age, income, education and number of
people in household.

The discriminant function that resulted identified five
discriminating variables and showed a significant difference
between group centroids ($X^2=12.249$, $p=.0315$) (See Table 4).
The function explained a moderate to low amount of variance
(Canonical $R=.438$).

The combination of the amount of effort required to
obtain coupons and expiration date of coupon ("motivation"
factor) best discriminated between groups (See Table 4).
Brand Matchers of top-of-mind awareness and coupon
collection felt the two characteristics of coupons were more
important than non-matchers ($M_{\text{mat}}=6.79$; $M_{\text{non}}=5.38$).

Two demographics, income and education, were decidedly
weaker, but still significant discriminators. Matchers had
slightly more income, but less education than non-matchers.

Two popular media for coupon distribution, FSI and direct mail, also showed discriminating power. Brand Matchers were slightly more likely to rely on FSIs as a source for coupons and slightly less likely to use direct mail as a source.

Conclusions

The results show a curious relationship between coupon collection and top-of-mind awareness that seems to be influenced by characteristics of coupons and coupon collecting behavior as well as demographic characteristics of consumers.

Consumers who felt two coupon characteristics, amount of effort needed to collect coupons and expiration date, were important in their decision to collect a coupon, were more likely to show a relationship between coupon collecting and top-of-mind awareness. Although measures concerning these characteristics did not identify the optimal level of effort or length of expiration, previous literature indicates consumers want minimal effort and maximum (or no) expiration date. Coupons with these characteristics may more likely be collected, thus providing brand name exposure as the coupon is repeatedly handled and referenced.

The failure to find discriminating power in the "utility" dimension of coupon characteristics, which included brand usually bought and the type of brand/product featured in coupon, helps refute the alternative explanation

that brand awareness or preference influences coupon collection. The components of the "utility" dimension seem to reflect the importance of brand preference on coupon collecting. A finding that the "utility" dimension distinguished brand matchers from non-matchers would suggest that brand preference influences the types of coupons collected, and hence explains the preponderance of matches on brands for top-of-mind awareness and coupon collection. However, this was not the finding.

The findings that matchers were more likely to use FSIs and less likely to use direct mail as coupon sources make intuitive sense. Coupons obtained through FSIs are embedded in large, colorfully attractive ads that help build brand impressions. Direct mail coupons are typically unaccompanied by impactful elements such as headlines and visuals.

The positive relationship between income and brand matching is consistent with the relationship found between income and coupon redemption (Blattberg et al 1978). Consumers who are more frequently involved in the couponing process are more likely to experience any effects (e.g., heightened awareness) associated with couponing. Although brand matchers collected three times more coupons and redeemed five times more than non-matchers, sizable variations existed among individuals, making further conclusions suspect.

The inverse relationship between education and brand matching is more than likely the result of the concomitant influence of media usage, particularly television viewing. Given the inverse relationship between education and television viewing hours (Dunn and Barban, 1986), heavier television viewing gives these consumers wider exposure to brand advertising. (The product categories for which the most coupons are collected receive heavy television advertising support, especially in women's programming (One-hundred leading 1987)) This exposure, in turn, increases brand recognition and may increase the likelihood of coupon collection for these brands. The act of coupon collecting may then elevate the brand to top-of-mind in awareness.

Discussion

The findings suggest that a relationship may exist between coupon collecting and top-of-mind awareness (TOMA) at least over a short time period (7 days). Monthly awareness studies reported by Advertising Age show that advertisers spend enormous amounts of money to achieve top-of-mind brand awareness in a product category (Hume 1987). For example, one company spent more than \$48 million in 1986 to maintain the top ranking in brand recall (One-hundred 1987). The value of top-of-mind awareness will escalate if studies like the one by Woodside and Wilson (1985) continue to show that TOMA has a strong, positive

relationship to brand preference and purchase intent. Couponing, employed as part of marketing strategy, may be an economically efficient method of achieving coveted TONA.

Cotton and Babb (1978) found coupon redemption also brings short-term attention to the brand. However, when the promotion ends (coupon expires) sales return to normal. Coupon collection, sorting and filing may have the added advantage of influencing attention to the brand over an extended time period, providing lagged effects not registered by monitoring coupon redemption. Coupons with long or no expiration date could give marketers limitless effects, unlike advertising effects, which last no more than nine months according to a meta-analysis by Clarke (1976) of 69 advertising studies. The finding that 90% of the entire sample referenced their coupon collection "just before" or "during" each shopping trip shows that a coupon's impact can be long term as well as timely.

Future studies can better solidify the evidence of couponing's influence on brand awareness by taking repeated measures of top-of-mind brand awareness days or weeks after a coupon has been collected. Repeated measures of top-of-mind awareness will also reveal measurement effects that may have been caused by the data gathering procedure used in this study.

In order to validate the influence of coupon collecting on the purchase decision process, future studies need to separate the influence of coupon collecting from

brand advertising on brand awareness. The four product categories for which top-of-mind brands matched coupons collected in this study all receive heavy advertising support (One-Hundred leading 1987). An experimental design that controls for media weight and other promotions (e.g., rebates, price reductions) would show the influence of coupon collecting by comparing coupon collectors and non-collectors on brand awareness, attitudes, purchase intentions and actual purchases.

In addition, measures of actual coupon collecting behavior, possibly through diaries, will reduce the number of variables that may have confounded the results. In this study, respondents were asked to recall coupon collecting behavior over a 7-day period. Problems of telescoping and obtaining accurate estimates of long-term couponing behavior (e.g., product categories with most coupons collected) may have clouded the data (Sudman and Bradburn 1982).

Despite these limitations, the results show that advertisers who evaluate the effectiveness of couponing by analyzing redemption rates may be overlooking important influences of couponing on the consumer decision process. Marketers may have to worry more about coupon collection rates than redemption rates. The findings of this study may also prompt marketers to address in the future an ancient philosophical question:

"Is it better to collect or redeem?"

Figure 1

Measures related to Coupon Collecting Behavior

- * # coupons collected in 7 days
- * # coupons redeemed in 7 days
- * method of removing coupons from medium
- * method of filing and referencing coupons
- * importance of coupon characteristics
 - a. monetary value
 - b. expiration date
 - c. newness of product
 - d. type of product/brand offered
 - e. brand usually bought
 - f. brand availability
 - g. effort to collect coupon
- * attitudes toward coupon collecting
 - a. worthwhile
 - b. convenient
 - c. support of significant others
 - d. thriftiness
 - e. fun
 - f. useful
 - g. important
 - h. valuable
- * likelihood of obtaining coupons from various sources
 - a. FSI
 - b. shoppers
 - c. newspapers
 - d. magazines
 - e. direct mail
 - f. in-on package
 - g. in-store
 - h. rebates
- * demographics
 - a. income
 - b. household size
 - c. # and age of children
 - d. employment status
 - e. own car
 - f. own residence
 - g. age
 - h. education
 - i. marital status

Table 1

Factor Loading Matrix for Couponing Attitude Scales
(N=151)

	<u>Ldg</u>	<u>h²</u>
Thrifty	.79	.63
Fun	.73	.54
Foolish	.72	.52
Guilty	.66	.45
Useful	.76	.58
Inconvenient	.72	.52
Valuable	.86	.75
Important	.84	.71
Support	.67	.47
Worth time	.84	.72
Good	.87	.76

Note: Guilty and Support were dropped from scale

EIGENVALUE	6.64
VARIANCE EXPLAINED	60%
RELIABILITY (Alpha)	.92

Table 2
Factor Loading Matrix for Coupon Characteristics
 (N=157)

	I	II	III	h^2
LABEL:	UTILITY	MOTIVATION	INNOVATIVENESS	
Product Type	<u>.64</u>	-.46	-.10	.64
Brand	<u>.69</u>	.09	-.39	.64
Usually buy	<u>.70</u>	.11	-.16	.52
Dollar Value	<u>.57</u>	-.40	-.02	.48
Expiration date	.34	<u>.51</u>	.46	.58
Amount of effort	.39	<u>.60</u>	.05	.52
Availability	.40	.11	<u>.46</u>	.38
New Product	.15	-.45	<u>.70</u>	.72
EIGENVALUE:	2.15	1.23	1.10	
VAR. EXPLAINED	27%	15%	14%	

Table 3

Sample Characteristics
(N=151)

DEMOGRAPHICS

AGE	MEAN=44.6
HOUSEHOLD SIZE	MEAN=2.78
INCOME	MEDIAN=\$20,000-30,000
SEX	MALES=28 (18%) FEMALES=124 (82%)

COUPONING HABITS

	<u>MEAN</u>	<u>S.D.</u>
# COUPONS CLIPPED/WEEK	20	
# MINUTES CLIPPING COUPONS/WEEK	23	
# COUPONS REDEEMED/WEEK	9.4	

COUPONING ATTITUDES

VALUABLE	4.22	.91
USEFUL	4.20	1.0
WORTH TIME	4.10	1.0
GOOD	4.06	1.0
FOOLISH (scale reversed)	4.05	1.3
THRIFTY	4.00	1.2
IMPORTANT	3.80	1.2
INCONVENIENT (scale reversed)	3.52	1.3
FUN	3.15	1.6
SUPPORT	2.93	1.4
GUILTY	2.68	1.4

COUPON CHARACTERISTICS

TYPE OF PRODUCT	4.40	.9
BRAND USUALLY BOUGHT	4.13	1.2
DOLLAR VALUE	4.13	1.1
BRAND	3.99	1.2
AVAILABILITY OF PRODUCT	3.90	1.1
EXPIRATION DATE	3.60	1.4
NEW PRODUCT	2.93	1.3
AMOUNT OF EFFORT TO OBTAIN	2.51	1.4

COUPON SOURCES

FSI	4.38	1.2
NEWSPAPER	3.98	1.4
DIRECT MAIL	3.16	1.4
IN/ON PACK	3.16	1.5
IN-STORE	2.88	1.5
REBATE	2.65	1.6
SHOPPER	2.53	1.5
MAGAZINE	2.44	1.4

STORAGE METHODS

COUPON CADDY	27%
ENVELOP/FILE/FOLDER	27%
BOX	20%

COUPON REMOVAL METHOD

USE SCISSORS	76%
RIP	20%

Table 4

Discriminant Analysis of Matchers vs. Non-matchers of Brand of Coupon Collected
and Top-of-mind Awareness

<u>Function</u>	<u>Eigenvalue</u>	<u>Can. Corr.</u>	$\frac{\chi^2}{1}$	$\frac{p}{.0315}$
1	.2374	.438	12.249	

Discriminating Variables	Standardized Discriminant Coefficients	Correlation with function	Group Means	
			Match	Non-match
Motivation	.8628	.68	6.79	5.38
Income	.5098	.17	2.88#	2.62#
Education	-.4972	.17	3.58#	3.79#
FSI	.4266	.42	4.58	4.07
Direct Mail	-.4091	-.15	3.18	3.38

6-point scales representing equal ranges that approximate interval level
measures were used.

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