

AN EMPIRICAL EXAMINATION OF HOW TIME AND SOCIOECONOMIC ATTRIBUTES OF FREQUENT-BUYER AND COUPON PARTICIPANTS DIFFER FROM THOSE OF "ORDINARY CUSTOMERS"

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More than 75 percent of households belong to at least one frequent-buyer club program and over 90 percent of these use their cards almost every shopping trip. While customer-loyalty efforts are a major promotional priority for 56 percent of marketers, marketing scientists have not compared the attributes of frequent-buyer club members to those of coupon-users and "ordinary" customers. Analyses revealed that frequent-buyers and coupon-users have lower opportunity costs for time, and lower socioeconomic standings, than do "ordinary" customers. Thus, managerial substitutions of frequent-buyer programs for coupon efforts, as coupon costs increase, seem rational.

INTRODUCTION

As noted by Houlden (1992), frequent-buyer programs are not new. Grocery stores, for instance, handed out green trading stamps in the 1960s. However, the computerized frequent-flyer program introduced by American Airlines in 1981 made the lick-and-stick approach somewhat obsolete (Neal 1992; Cuneo 1995). Thus, the number of stores offering trading stamps decreased from 75 percent in 1969 to 8 percent in 1987 (*Incentive* 1988). By the mid-1980s, hotels, retail chains, and financial services had joined the airlines in offering computerized loyalty-marketing programs (Orr 1995). The major reasons, according to Houlden (1992), were that they: (1) increased sales, (2) did not require discounting, and (3) allowed retailers to capture better customer data. Moreover, Raphael (1992) provided evidence that those with frequent-buyer cards spent up to 95 percent more than did those without such cards.

In the late 1980s and early 1990s, relationship-marketing programs experienced very rapid growth. Shababb (1987) and Cheong (1993) noted that coupon related expenses were increasing by 26 percent annually, while their yearly redemption rates were decreasing by 2.0 percent. Concomitantly, computers, credit cards, and toll-free numbers made it easier to administer frequent-buyer programs (Roel 1988). An *Incentive Marketing* (1987) article stated that, because of high computer costs, frequent-buyer programs were only cost-effective for retailers with annual revenues exceeding \$100 million. Yet, by the 1990s, many felt that they provided a better ROI for small retailers than newspaper advertising (Raphael and Raphael 1996).

Focusing on this latter point, several researchers found that customer loyalty programs resulted in large sales increases. Handley (1991), for example, attributed FoxMeyer Corporation's double-digit sales growth rate to its frequent-buyer program. Similarly, a *Catalog Age* (1993) article about Fidelity Products indicated that its consumer rewards program increased annual sales by 10-15 percent. During 1995, Raphael concluded that "in more than 90 percent of the cases" retailers see "at least a six percent improvement" in profits within nine months of their starting frequent-buyer

programs. Thus, by the mid-1990s, one in five supermarkets had such programs (Raphel and Raphel 1996).

Because of retailers' successes with loyalty-reward efforts and because the cost of acquiring a customer is at least 25 percent greater than five years ago (Miller 1998), frequent-buyer programs now top the list of most popular types of consumer promotions. For 56 percent of marketers they were recently a major promotional priority (Wood 1998). Currently, over 75 percent of the populace are members of a store loyalty program. Of these, 42 percent have one membership, 25 percent have two memberships, and 11 percent belong to three or more loyalty club programs. And according to a *Chain Store Age* (1998) article, more than 90 percent of the cardholders use their card almost every time they shop. Consequently, many stores now average over 80 percent of dollar transactions on frequent-buyer cards (Raphel and Raphel 1996), and reduce defections from 29 percent to 22 percent (Raphel 1995).

These continuing marketing programs reduce defections by providing customers with discounts not offered to "ordinary" customers (Oberndorf 1997). Thus, grocers, like Schnucks, have viewed frequent shopper cards as a means to issue "paperless coupons" (Weinstein 1993). However, some individuals like Hughes (1999) believe that these types of programs will result in retailers "cannibalizing" their businesses with "rewards to people who are going to shop with you anyway." Some of these rewards and "added-value benefits" come in the form of customer newsletters, relational birthday greetings, and tie-in merchandising efforts (Kerwin 1992). Due to tie-in merchandising efforts, retailers are often able to exchange information about each other's clients, which has further led to their becoming a standard sales promotion vehicle along with price rebates, price-offs, sampling, bonus packs, premiums, specialty advertising, contests, and sweepstakes (Ong 1999).

Yet, despite the widespread acceptance of frequent-buyer cards by both retailers and consumers, very little academic work has been done regarding

the types of customers who participate in such programs. Three reasons include: (1) the newness of the programs, (2) the reluctance of companies to divulge confidential trade information, and (3) the confounding effects of tie-ins. Focusing upon the latter issue, the British Airways Air Miles program has more than 130 tie-in participants including Shell, Debenhams retail, Hertz, and NatWest (Neal 1992). Nevertheless, loyalty-marketing programs have made strong inroads against coupons (Yarbrough 1997). This is evidenced by the drop in coupons distributed from 327 billion in 1994 (Reina 1995) to 276 billion in 1997, according to *Promo Magazine's 6th Annual Sourcebook*. Therefore, as noted by Clark and Williams (2000) some insights may be gleaned from the academic research done on coupon users.

Many of these coupon studies shed additional light on the Babakus, Tat and Cunningham (1988) findings. In other words, they looked at (1) the negative relationship between the perceived value of time and the use of coupons, and (2) the positive relationship between price sensitivity and the use of coupons. Focusing on the time-related concerns, the work of Schlossberg (1993), for example, showed that senior citizens have coupon redemption rates several times higher than any other age group. Similarly, the research of Mittal (1995) found that families with employed women were less likely to use coupons. Moreover, a study by D'Arcy Masius Benton & Bowles, published in *Marketing Communications* (1989), discovered that households with children (i.e., especially young ones) were not as likely to use coupons as households without children.

Regarding the price-sensitivity issues, the work of Cheong (1993) showed that: (1) economic incentive is the major reason why households use coupons, and (2) larger households are most likely to use coupons due to their having lower per capita incomes. Similarly, Tat and Bejou (1994) found that a larger percentage of nonusers had higher incomes and educational levels. Thus, the nonuser households were more likely to be "white collar."

Although the Tat and Bejou (1994) work seemed to contradict studies performed in the mid-1980s, Levedahl (1988) and Green (1995) showed that as income and education increased so did households' access to newspaper and magazine coupons. Therefore, the articles suggesting that coupon redemption increased with income and education were somewhat misleading according to these latter two researchers. Explained differently, those with lower socioeconomic statuses are more likely to use coupons when given equal access to coupons. The reason is that coupons are "damaging to one's status" and "humiliating to one's self image" (Bonnici, Campbell, Fredenberger and Hunnicutt 1996/1997). Similarly, those who use coupons are more likely to feel good about using them (Babakus, Tat, and Cunningham 1988).

As noted by the work of Schindler (1992), coupon users feel good about using coupons due to the monetary savings they generate. In a like vein, Bawa, Srinivasan, and Srivastava (1997) found that individuals are motivated by the attractiveness of the coupon offer. Furthermore, they along with Bawa and Shoemaker (1987), Hume (1991), Schneider and Currim (1991) and Mittal (1994) found that certain psychological factors positively motivate individuals to clip coupons. For instance, as the use of coupons for multiple product categories and acceptance of coupons by family and friends increase so does coupon usage. Similarly, "active shoppers" are more likely to clip coupons, while "passive shoppers" tend to use only in-store coupons. Moreover, as the fear of a recession increases so too does coupon usage, as a general rule.

Consumers are also more motivated to use coupons on their favorite brands (Shoemaker and Tibrewala 1985), and on major shopping trips (Kahn and Schmittelein 1992). For these reasons, Papatla and Krishnamurthi's (1996) work suggests that they tend to erode brand loyalty and increase price sensitivity. Presently, there is some evidence to support the notion that these same concerns may apply to frequent-buyer club members. This evidence is found in the work of Clark and Williams (2000) who showed that frequent-buyer club members have time

and socioeconomic attributes consistent with past findings for coupon-users.

Specifically, their work revealed that the presence of children decreased the participation levels for retailers' frequent-buyer programs. In a like fashion, their study showed that households with senior citizens were more inclined to join loyalty-reward clubs than those headed by younger adults, and that households with one or no worker were more likely to become relationship-marketing members than those with two or more employed. Additionally, their research indicated that more household members, lower incomes, and blue-collar occupations increased frequent-buyer participation.

However, while the Clark and Williams (2000) study compared frequent-buyer club members to "ordinary customers," their 1997 database did not have coupon-user data in it. Therefore, it did not allow for a direct comparison of frequent-buyers to coupon users. For these reasons, data was collected that allows for a head-to-head-to-head comparison of loyalty-reward participants to coupon-users to "ordinary-customers." Thus, this work builds upon the Clark and Williams (2000) findings.

HYPOTHESES

Based upon the *Marketing Communications* (1989) work, it is hypothesized that the presence of children will decrease the likelihood of frequent-buyer and coupon participation. This should especially be the case for retailers that do not have an environment catering to children, and for retailers that do not sell "necessity items."

One reason is that children make it hard for parents to concentrate on filling out relationship marketing applications and difficult for them to sift through coupons without their being interrupted. Thus, based on the *Marketing Communications* (1989) study, it is hypothesized that those with children will be less motivated to join such frequent-buyer programs than are "empty nesters." This is despite the strong cost savings that households with children might realize. Similarly, based on previous coupon studies, it is hypothesized that those with

children will not be as likely to use coupons. Moreover, if empty nest households (i.e., when compared to those with children living at home) behave analogously toward frequent-buyer programs and coupons, the results should support H1c.

H_{1a}: Empty nest households will more likely participate in frequent-buyer programs than will households that still have children living at home.

H_{1b}: Empty nest households will more likely use coupons than will households that still have children living at home.

H_{1c}: Empty nest households will exhibit similar behaviors (i.e., relative to homes with children) in terms of their frequent-buyer and coupon usage rates.

Senior citizens are very receptive to coupons (Schlossberg 1993) and they seem drawn toward frequent-buyer programs (Colavecchi 1993; Andreoli 1995; *Discount Store News* 1996; *Marketing Week* 2001). Thus, it is hypothesized that households with retired heads will be more motivated to join frequent-buyer programs and use coupons than will households with working heads. As noted by the preceding researchers, retired individuals are drawn to coupons and frequent-buyer programs based on a desire to "pass free time."

According to their findings, retired individuals have more "free time" for two major reasons. The first is that they do not have work deadlines. Second, they do not have to spend time caring about the basic needs of their children. Therefore, they often take the few minutes needed to clip coupons and complete loyalty-reward applications. Additionally, if they view frequent-buyer programs as coupons, H2c should be supported.

H_{2a}: Households with retired heads will more likely participate in frequent-buyer programs than will households where at least one member is still working.

H_{2b}: Households with retired heads will more likely use coupons than will households where at least one member is still working.

H_{2c}: Households with retired heads will exhibit similar behaviors (i.e., relative to homes with working heads) in terms of their frequent-buyer and coupon usage rates.

Based on the coupon-usage studies of Babakus et al. (1988) and Mittal (1995), it is hypothesized that households with two or more working members will be less motivated to use coupons and join frequent-buyer programs than will households with one or no working member. The rationale, based on these academicians' findings, is that career ladies will not take the time to clip coupons, nor will they be as willing to complete the paperwork required of relationship marketing programs. Moreover, if households with two or more working members (i.e., when compared to those with zero or one working person) behave similarly toward frequent-buyer programs and coupons, there should be support for H3c.

H_{3a}: Households with two or more working members will be less likely to participate in retailers' frequent-buyer programs than will households with fewer than two working members.

H_{3b}: Households with two or more working members will less likely use retailers' coupons than will households with fewer than two working members.

H_{3c}: Households with two or more working members will exhibit similar behaviors (i.e., relative to homes with zero or one working person) in terms of their frequent-buyer and coupon usage rates.

Due to the Cheong (1993) work, it is hypothesized that larger households will be more motivated to use coupons and become frequent-buyer participants than will smaller households. The reason is that the total savings will be greater for bigger households than for smaller households. This, coupled with the

added financial pressures of stretching income(s) over more members, should cause larger households to take advantage of both coupons and loyalty incentives. Moreover, if households with many members (i.e., when compared to those with fewer persons) behave similarly toward frequent-buyer programs and coupons, there should be support for H4c.

H_{4a}: Households with many members will more likely participate in frequent-buyer programs than will households with fewer members.

H_{4b}: Households with many members will more likely use coupons than will households with fewer members.

H_{4c}: Households with many members will exhibit similar behaviors (i.e., relative to homes with fewer persons) in terms of their frequent-buyer and coupon usage rates.

As previously noted, lower income households are more receptive to coupons when given equal access to them (Tat and Bejou 1994). In a like vein, the opportunity costs associated with filling out a relationship-marketing application are quite low, for the less wealthy individuals. On the other hand, the loyalty-reward-membership-gains are relatively higher for these lower income households. Therefore, it is hypothesized that the lower income households will be more motivated to take the few minutes needed to clip coupons and complete frequent-buyer applications, while the higher-earning households will be less motivated to perform these activities. Moreover, if households with higher incomes (i.e., when compared to those with lower incomes) behave similarly toward frequent-buyer programs and coupons, there should be support for H5c.

H_{5a}: Households with higher incomes will less likely participate in frequent-buyer programs than will households with lower earnings.

H_{5b}: Households with higher incomes will less likely use coupons than will households with lower earnings.

H_{5c}: Households with higher incomes will exhibit similar behaviors (i.e., relative to homes with lower incomes) in terms of their frequent-buyer and coupon usage rates.

Lastly, based upon the Levedahl (1988), Green (1995), and Bonnici et al. (1996/1997) studies, it is hypothesized that blue-collar households will be more motivated to clip coupons and participate in frequent-buyer programs than will white-collar households. The rationales for these beliefs are that white-collar households view the societal-standing costs of clipping coupons and filling out loyalty-reward applications as too high.

This is especially the case when they are "not held captive like airline passengers." Moreover, based on the Bonnici et al. (1996/1997) work, it is believed that white-collar households tend to view the savings from coupons and relationship-marketing efforts as "small" and the tasks of filling out the frequent-buyer applications as "demeaning." Furthermore, if blue-collar working households (i.e., when compared to white collar homes) behave similarly toward frequent-buyer programs and coupons, there should be support for H6c.

H_{6a}: Blue-collar households will more likely participate in retailers' frequent-buyer programs than will white-collar households.

H_{6b}: Blue-collar households will more likely use retailers' coupons than will white-collar households.

H_{6c}: Blue-collar households will exhibit similar behaviors (i.e., relative to white-collar homes) in terms of their frequent-buyer and coupon usage rates.

In short, H1a, H1b, H1c, H2a, H2b, H2c, H3a, H3b, and H3c assume that those households that have the time to search for coupons also have the time to fill out frequent-buyer applications. Conversely, those placing a premium on their time will not clip coupons, nor will they be motivated to fill out frequent-buyer applications. Explained differently,

those households that have a low opportunity cost associated with their time will take the time needed to clip coupons and fill out frequent-buyer applications. In a like fashion, H4a, H4b, H4c, H5a, H5b, H5c, H6a, H6b, and H6c assume that those working households receiving the highest relative socioeconomic advantages from coupons will also gain the most from filling out frequent-buyer applications. On the other hand, those who have high pecuniary or societal opportunity costs will not clip coupons, nor will they be motivated to fill out frequent-buyer applications. Therefore, the twelve hypotheses assume that frequent-buyer programs are in essence "paperless coupons."

METHODOLOGY

To test the aforementioned hypotheses, "frequent purchaser," "coupon-user" and "ordinary customer" information was obtained at a Texas-based retailer's twelve sites. Six sites have one format, and the other six sites have a different format. The store offerings, which are slightly different at the two types of stores, have strong appeal to a "patriotic clientele." Some of the big-box, sports-person stores are in centers near grocery stores, while other more limited amenity outlets are in locations distant from such anchors.

Due to the nature of its products, the pull indices for military and agricultural personnel are extremely high. Similarly, the pull indices are high for those working in service occupations. Both types of stores serve roughly the same number of females as males. The three databases contain address information and basic demographics for each household. Comparable data had come from (1) frequent-buyer applications, (2) surveys, and (3) block group averages provided by third party syndicated data vendors.

Applications for the frequent-buyer programs were located in display stands. These were stationed (1) at the stores' entranceways, (2) near the cash registers, and (3) in the center of the stores. Additionally, the retailer's personnel wore large lapel pins informing patrons about the merchant's relationship-marketing benefits. Therefore, the frequent-buyer programs were advertised within the stores rather than on television or radio, or in magazines or newspapers.

This, in turn, alleviated the need to statistically control for confounding effects caused by advertising efforts.

Customers who filled out applications received five immediate bonus points and a temporary card. For every subsequent visit the purchaser received one point for each dollar spent. Whenever a household obtained a 100-point milestone, the retailer mailed it two \$5 gift certificates. The frequent-purchaser database had been in operation for more than four years. Thus, in accordance with the "rules and conditions" listed on the loyalty-reward application brochure, the retailer had removed the households that had not made a purchase in the last twelve months. Because the retailer was not "tied in" with other merchants, the patrons' information was not provided to any other companies. This too reduced confounding impacts.

Information on the "ordinary customer" database was obtained by asking customers, who did not use a frequent buyer card or a coupon, about their neighborhood. In other words, they were asked about the street they lived on (but not their exact house numbers) so special offers could be sent to their neighborhood. The data collection was done for a two-week period, and the information was then sent to a syndicated data vendor that merged the retailer's data with its own.

Because the retailer had bulk mailed coupons to all non-frequent buyer households in several hundred Texas zip codes, coupon-users were also asked about their "residential addresses." These 20 percent discount-on-mainstay-product-purchase coupons had been mailed out ten days before data collection began. They had an expiration date that coincided with the last day of data collection. The coupon-user information was also sent to the syndicated data vendor that merged this data with its own demographic information. Lastly, the information for the frequent-purchasers was obtained by dumping files for those who used their cards during the first two weeks of November 1999. Although the frequent-buyer file contained detailed household-level information, comparable "address information" was instead sent to the syndicated data

vendor, which merged the retailer's file with its aforementioned demographic database.

Despite the inherent weaknesses of syndicated information, the decision to merge purchased data with all three files was made in order to have similarly obtained data for the different groups. Moreover, it was necessary since the retailer would not allow the interviewers to ask for "personal information," other than "street lived on" information. Unfortunately, while this approach was "sub-optimal" from an academic perspective, the CEO of the retailing company had a "real world" concern about alienating "ordinary" and "coupon" patrons by asking them a lot of detailed questions. This perspective overshadowed a desire for theoretical knowledge, and imposed some limitations on subsequent analyses and conclusions.

Even so, data consisting of (1) those who used a frequent-buyer card but no coupon, (2) those who used a coupon but no card, and (3) those who used neither a card nor a coupon allowed for comparisons not made in the Clark and Williams (2000) work. In so doing, the data allowed for analyses not yet performed by other academicians. However, to be most beneficial the resultant files with the added syndicated data needed to be "cleaned." This involved removing the households living outside of the zip codes where coupons were not mailed. The "ordinary customer" database appeared the "dirtiest."

Most of the individuals removed from the "ordinary customer" database were "out of town visitors." Yet, there were also a few individuals on the frequent buyer database that lived outside of Texas. According to the CEO of the retailing firm, some of these routinely traveled to the state for business. Also, according to the interviewers, there were persons from distant areas, as well as frequent-buyers, who had apparently received a coupon from a relative or other acquaintance.

Each clean database contained comparable information about whether (1) children lived at the homes, (2) the household heads were of retirement ages, and (3) the households had two or more laborers. Moreover, each file indicated (1) household

sizes, (2) incomes, and (3) occupations. Furthermore, when cross-tabulations and Chi-square analyses were performed on the data, the results for both types of stores appeared similar. Thus, the reported results display only the findings for the statistical analyses that were done when the information for both types of stores was combined.

RESULTS

In order to address H1a, H1b, and H1c, the raw counts for the number of households with and without children were compiled. This was done for the "frequent-buyer," "users of coupons," and "ordinary customer" files. Similarly, for H2a, H2b, and H2c, the number of households with heads under 65 and those with household heads age 65 and up were calculated. Then, for H3a, H3b, and H3c, the number of households with zero or one worker, and those with two or more workers, were determined.

To address H4a, H4b, and H4c, the raw counts for the number of working households with one or two versus three or more household members were compiled. In like fashion, for H5a, H5b, and H5c, the number of non-retired households with incomes below \$65,000 and those with household incomes of at least \$65,000 were calculated. The rationale for the \$65,000 breakpoint was that it "split the middle class." Thus, three entire social classes were in the top grouping, while all the members in the bottom three of seven social classes were in the under \$65,000 category. Lastly, for H6a, H6b, and H6c, the total blue-collar and white-collar working households were determined.

While the "frequent-buyer" file did not have any missing values, 13 percent of the "user of coupons," and 17 percent of the "ordinary customer" households had not provided their "street lived on" information. Thus, proportional numbers of the different classifications were assigned to the missing cases based on the proportions present in the 87 percent (i.e., 100 percent minus 13 percent) and 83 percent (i.e., 100 percent minus 17 percent) groups.

As shown by Table 1, the "frequent-buyer" file had 11,943 households and the "coupon-user" database had 6681 households for the Texas stores. On the other hand, the "ordinary customer database" for the same retail outlets had 21,840 households. Besides the raw counts, the percentages are provided. Then, in Table 2, the "pull indices" are provided for the "frequent-buyer" and "coupon-user" groups compared to "ordinary customers." These pull indices were calculated in much the same manner as those sold by A. C. Nielsen, Arbitron, Information Resources, Mediamark Research, Selling Areas-Marketing, and Simmons. Explained differently, the first pull index of 99.00 represents 100 times the value yielded by 77.20 percent divided by 77.98 percent. The other pull indices were similarly calculated.

As displayed by the Table 2 results, the directional relationships for the "frequent-buyers" and "coupon-users" (i.e., in terms of children at home, age of household head, and number of employed workers) when compared to the "ordinary customers" were as hypothesized. In other words, as the number of children increases, the households are less likely to join frequent-buyer clubs and use coupons. Similarly, households with retired household heads and fewer employed persons are more motivated to join loyalty-reward programs and use coupons, as shown by the pull indices exceeding 100.00.

When the households without a working household head were removed from the files, the

TABLE 1
Raw Counts of "Frequent-buyer," "Coupon-user," and "Ordinary" Households

	"Frequent-buyer" File Counts	"Frequent-buyer" Percentages	"Coupon-user" File Counts	"Coupon-user" Percentages	"Ordinary-buyer" File Counts	"Ordinary-buyer" Percentages
Households w/ Kids at Home	9220	77.20	5127	76.74	17031	77.98
Households w/o Kids at Home	2723	22.80	1554	23.26	4809	22.02
Households w/ Working Age Head	10524	88.12	5887	88.12	19379	88.73
Households w/ Head Aged 65 or Older	1419	11.88	794	11.88	2461	11.27
Households w/ One or None Working	6948	58.18	3741	55.99	12012	55.00
Households w/ Two or More Workers	4995	41.82	2940	44.01	9828	45.00

TABLE 2
Pull Indices for "Frequent-buyer"
and "Coupon-user" Households

	"Frequent-buyer" Pull Indices	"Coupon-user" Pull Indices
Households w/ Children at Home	99.00	98.41
Households w/o Children at Home	103.55	105.63
Households w/ Working Age Head	99.31	99.31
Households w/ Head Age 65 or Older	105.44	105.47
Households w/ None or One Worker	105.78	101.81
Households w/ at least Two Workers	92.94	97.79

"frequent-buyer" file had 10,524 working households and the "coupon-user" file had 5887 working households for the Texas stores. The "ordinary-customer" database, on the other hand, had 19,379 working households for these same stores. Table 3 reflects these numbers, as well as the percentages. Then, in Table 4, the pull indices are provided for the "frequent-buyer" and "coupon-user" groups. The calculation for these indices is similar to those in Table 2.

As was the case for the first nine hypotheses, the pull indices provided some support for the last nine hypotheses. Thus, Chi-square tests were performed for each hypothesis to examine if the results were significant. For H1a, the 9220, 2723, 17031, and 4809 values were entered into a two by two Chi-square matrix. In a like fashion, the 5127, 1554, 17031, and 4809 values were used to test H1b.

TABLE 3
Raw Counts of "Frequent-buyer," "Coupon-user," and "Ordinary" Working Households

	"Frequent-buyer" File Counts	"Frequent-buyer" Percentages	"Coupon-user" File Counts	"Coupon-user" Percentages	"Ordinary-buyer" File Counts	"Ordinary-buyer" Percentage s
Households w/ One or Two Members	2435	23.14	1414	24.02	4659	24.04
Households w/ At Least Three Members	8089	76.86	4473	75.98	14720	75.96
Households Earning Under \$65,000	6345	60.29	3715	63.11	11179	57.69
Households Earning At Least \$65,000	4179	39.71	2172	36.89	8200	42.31
White-collar Households	8065	76.63	4458	75.73	15089	77.86
Blue-collar Households	2459	23.37	1429	24.27	4290	22.14

Similarly, the other values associated with the remaining hypotheses were entered into Chi-square matrices.

TABLE 4
Pull Indices for "Frequent-buyer" and "Coupon-user" Working Households

	"Frequent-buyer" Pull Indices	"Coupon-user" Pull Indices
Households w/ One or Two Members	96.24	99.91
Households w/ At Least Three Members	101.19	100.03
Households Earning Under \$65,000	104.52	109.39
Households Earning At Least \$65,000	93.84	87.19
White-collar Households	98.42	97.26
Blue-collar Households	105.55	109.65

The Chi-square results for the "time-related" hypotheses are shown in Table 5. The "frequent-buyer" compared to "ordinary customer" results (i.e., H1a, H2a, and H3a), as shown by the $p < 0.04$, $p < 0.03$, and $p < 0.01$ levels, were significant. In a like vein, the "coupon-user" compared to "ordinary customer" results, as shown by the $p < 0.01$, $p < 0.11$, and $p < 0.10$ significance levels, were significant. Moreover, as hypothesized, there were no significant differences between the "frequent-buyers" and "coupon-users," as shown by H1c, and H2c. However, H3c was not supported as shown by the highly significant difference between the loyalty-reward and coupon-user groups ($p < 0.01$).

Just as Table 5 showed the time-related Chi-square results, the Chi-square results for the "socioeconomic-related" hypotheses are shown in Table 6. The "frequent-buyer" compared to "ordinary customer" results (i.e., H4a, H5a, and H6a), as shown by the $p < 0.03$, $p < 0.01$, and $p < 0.01$ levels, were significant. Similarly, H5b ($p < 0.01$) and H6b ($p < 0.01$) were each supported. However,

TABLE 5
Chi-square Analyses Showing Significant Differences Between "Frequent-buyer," "Coupon-user" and "Ordinary" Households

Comparison Between	Chi-square Statistic	Significance Level (1 d.f.)
No Kids at Home in "Frequent-buyer" Vs. "Ordinary" Customer Households	4.24	0.04
No Kids at Home in "Coupon-user" Vs. "Ordinary" Customer Households	5.99	0.01
No Kids at Home in "Frequent-buyer" Vs. "Coupon-user" Households	1.42	N.S.
Age 65+ Head in "Frequent-buyer" Vs. "Ordinary" Customer Households	4.49	0.03
Age 65+ Head in "Coupon-user" Vs. "Ordinary" Customer Households	2.54	0.11
Age 65+ Head in "Frequent-buyer" Vs. "Coupon-user" Households	<0.001	N.S.
Zero or One Worker for "Frequent-buyer" Vs. "Ordinary" Customer Households	48.68	<0.01
Zero or One Worker for "Coupon-user" Vs. "Ordinary" Customer Households	2.67	0.10
Zero or One Worker for "Frequent-buyer" Vs. "Coupon-user" Households	23.07	<0.01

TABLE 6
Chi-square Analyses Showing Significant
Differences Between "Frequent-buyer,"
"Coupon-user" and "Ordinary"
Working Households

Comparison Between	Chi-square Statistic	Significance Level (1 d.f.)
"Frequent-buyer" Vs. "Ordinary Customer" Households w/ One or Two Members	4.71	0.03
"Coupon-user" Vs. "Ordinary" Customer Households w/ One or Two Members	<0.002	N.S.
"Frequent-buyer" Vs. "Coupon-user" Households w/ One or Two Members	4.48	0.03
"Frequent-buyer" Vs. "Ordinary" Customer Households Earning Less Than \$65,000	29.95	<0.01
"Coupon-user" Vs. "Ordinary" Customer Households Earning Less Than \$65,000	70.82	<0.01
"Frequent-buyer" Vs. "Coupon-user" Households Earning Less Than \$65,000	35.80	<0.01
"Frequent-buyer" Vs. "Ordinary" Customer Blue-collar Households	9.21	<0.01
"Coupon-user" Vs. "Ordinary" Customer Blue-collar Households	15.59	<0.01
"Frequent-buyer" Vs. "Coupon-user" Blue-collar Households	4.72	0.03

H4b was not supported since there were no significant differences between the "coupon-user" and "ordinary customer" groups. Additionally, H4c, H5c, and H6c were not supported, since there were

significant differences between the "frequent-buyer" and "coupon-user" working household groups.

DISCUSSION

Based on the directionality of the results for both the "frequent-buyer" and "coupon-user" groups compared to "ordinary customers," it appears as though loyalty-reward and coupon programs attract similar types of customers. Specifically, the types of individuals who have low opportunity of time costs and high socioeconomic incentives to clip coupons are also more likely to fill out relationship-marketing applications. Empty nest households, when compared to those with children, are more receptive to both frequent-buyer and coupon programs. Moreover, senior citizens are more likely to have a frequent-buyer membership and use coupons than are households headed by younger individuals. Furthermore, households with two or more workers are less likely to participate in relationship-marketing and coupon programs than are those households with under two workers.

In terms of the socioeconomic variables, working households with three or more household members have slightly higher probabilities of joining incentive-reward programs than do working households with fewer members. However, while the directionality of the index suggests that households with three or more members are more likely to use coupons, the Chi-square results are insignificant. Nevertheless, despite these mixed results, working households with annual earnings under \$65,000 are much more receptive to both relationship marketing and coupon programs than are working households earning at least \$65,000 annually. Lastly, more blue-collar households than white-collar households become frequent-buyer and coupon participants.

From a managerial perspective, it appears as though it would not be very cost effective to target frequent-buyer campaigns toward dual-income, affluent, white-collar families with few, if any, children. On the other hand, it would make sense to target neighborhoods where (1) most of the households consist of empty nest, age 65 and older

individuals with zero or one worker or (2) there are high concentrations of blue-collar, modest-income families having many children. With the purchase of a direct mail and/or phone list, these individuals could be readily targeted.

Additionally, despite the limitations associated with the use of syndicated data (i.e., block group averages), it appears as though managers are not entirely sacrificing the coupon-user group when they concentrate on frequent-buyers. The reason is that the frequent-buyers and coupon-user groups displayed attribute tendencies that were similar. In fact, in two of six cases no statistically significant differences were observed between the "frequent-buyer" and "coupon-user" groups. However, because significant differences between these latter two groups were observed in four instances, there is a need for further research investigating exactly how much overlap exists between the frequent-buyer and the coupon-user groups. Moreover, there is a need for additional work examining the motivations of each of these two types of purchasers when compared to "ordinary customers."

Furthermore, there is a need for research involving survey responses. The reason is that the measures will be "purer," and have "less noise." Additionally, survey responses will allow for studies where the researcher statistically controls for some predictors, while examining the impacts of others. Thus, survey results should help reduce the multicollinearity, which is often found amongst predictors derived from syndicated data, and potentially eliminate "mixed results." As a result, researchers will be able to build robust predictive models that can then be used to better classify households as "coupon-user," "frequent-buyer," "ordinary," or "non-patron" homes. In the interim, however, this work provides at least some evidence that frequent-buyer cards may in some instances be viewed as "coupons."

CONCLUSIONS

This study that involved two types of stores showed that households with more "free time" and "lower socioeconomic status" had increased probabilities of

becoming frequent-buyer club members and users of coupons. Therefore, the psychological factors associated with frequent-buyers may be very similar to those of coupon-users. In fact, just as Mittal (1995) found that a small segment of coupon clippers view the search for savings as a "game" or "hobby," it also seems reasonable that a small segment of the loyalty-reward participants might attempt to pay the least for certain types of products. However, marketing research is still needed to adequately address these types of issues. Meanwhile, this study provides evidence to both academicians and managers that members of frequent-buyer programs are in some ways similar to coupon users.

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