

AN INVESTIGATION OF COUPON REDEMPTION
PATTERNS IN THE GROCERY STORE

A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF MASTER OF SCIENCE
IN THE GRADUATE SCHOOL OF THE
TEXAS WOMAN'S UNIVERSITY

COLLEGE OF NUTRITION, TEXTILES, AND
HUMAN DEVELOPMENT

BY

BARBARA J. BELCHER, B.S.

DENTON, TEXAS

AUGUST, 1982

The Graduate School
Texas Woman's University
Denton, Texas

July 12 19⁸²

We hereby recommend that the thesis prepared under
our supervision by Barbara J. Belcher
entitled An Investigation of Coupon Redemption Patterns
in the Grocery Store

be accepted as fulfilling this part of the requirements for the Degree of Master
of Science

Committee:

Dissertation/Theses signature page is here.

To protect individuals we have covered their signatures.

ACKNOWLEDGMENTS

I wish to express my sincere thanks to the food chain for their support and commitment to this study. I also wish to recognize those most instrumental in the compilation and completion of this thesis:

Dr. Lillian Chenoweth
Dr. June Impson
Dr. Derrell Bulls

I extend special THANKS to my Mom and Dad for the unlimited use of their dining room table and 'crack-the-whip' support (not to mention the ROLEX motivation).

TABLE OF CONTENTS

ACKNOWLEDGMENTS	iii
LIST OF TABLES.	vi
Chapter	
I. INTRODUCTION.	1
Statement of the Problem.	2
Purpose	3
II. REVIEW OF LITERATURE.	5
Food Industry Retailers and Coupons	5
Food Retailers' Negative Views.	5
Food Retailers' Positive Views.	7
Food Industry Manufacturers and Coupons	9
Food Manufacturers' Negative Views.	10
Food Manufacturers' Positive Views.	13
Consumers and Coupons	15
Consumers' Negative Views	16
Consumers' Positive Views	17
Food Industry Scanning Systems and Coupons	19
Future of Coupons in the Food Industry.	21
III. PROCEDURES.	25
Data Base	25
Population Profile.	25
Description of Findings	26
Definition of Terms	26
IV. RESULTS	29
Store Profiles.	29
Advertising	32
Description of Sales.	33
Description of Store A Sales.	34
Description of Store B Sales.	38
Description of Store C Sales.	38

Chapter

Description of Coupon Redemption	
Patterns	41
Coupon Redemption at Store A	41
Coupon Redemption at Store B	43
Coupon Redemption at Store C	46
Coupon Redemption Profile Comparisons	46
HVSD Customer Coupon Averages	49
Customer Coupon Average Store A	51
Customer Coupon Average Store B	53
Customer Coupon Average Store C	53
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	56
Summary	58
Retailers	58
Manufacturers	59
Consumers	60
Researchers	61
Limitations	62
Recommendations	63
REFERENCES	64

LIST OF TABLES

Table

1.	Store Profiles.	30
2.	Highest Volume Sales Day Profile.	35
3.	Average Customer Purchase (Store A)	36
4.	Sales Profiles.	37
5.	Average Customer Purchase (Store B)	39
6.	Average Customer Purchase (Store C)	40
7.	Coupon Redemption Daily Figures	42
8.	Highest Volume Sales Day Coupon Redemption Patterns (Store A)	44
9.	Highest Volume Sales Day Coupon Redemption Patterns (Store B)	45
10.	Highest Volume Sales Day Coupon Redemption Patterns (Store C)	47
11.	Highest Volume Sales Day.	48
12.	Daily Coupon Redemption Patterns.	50
13.	Highest Volume Sales Day Customer Coupon Averages (Store A)	52
14.	Highest Volume Sales Day Customer Coupon Averages (Store B)	54
15.	Highest Volume Sales Day Customer Coupon Averages (Store C)	55

CHAPTER I

INTRODUCTION

The information on coupon trends today and speculations for future trends of couponing strongly imply the continuation of coupons as a major marketing technique in the food industry (Food Marketing Institute, March 1981; Linsen, February 1981; Rauch, December 1979). The use of cents-off coupons as a marketing tool is viewed as one of the most effective means of advertising products today (Matthews, May 1980; Nielson Clearing House, 1980). Manufacturers of products, retail grocers who sell the goods, and consumers who purchase the products all have voiced views on the advantages and disadvantages of coupons (Food Marketing Institute, March 1981; Grocer's Spotlight, August 1980; Neilsen Clearing House, 1980; Zimmerman, October 27, 1980). Manufacturers are able to plan for their coupon promotionals according to past redemption patterns and by using consumer profile studies (United States Department of Agriculture, September 1978).

Retail grocers invite any form of promotions which may increase sales. The handling costs of coupons have been a concern of the retail grocers. In recent years, the retailer's cost of handling coupons has been a concern.

Manufacturers increased the coupon handling cost from 5 to 7 cents for retailers so that the coupon would continue as an effective advertising tool (Valentino, May 1981; Densford, August 1980). Consumers continue to use cents-off coupons at the grocery check-out registers with coupon redemption rates increasing each year (Linsen, February 1981). The food industry is concerned with who actually uses coupons, and manufacturers have been approached on whether their means of coupon distribution is fair to all consumers (Zbytniewski, June 1979; Matthews, May 1980).

This research addresses the use of cents-off coupons in the supermarket with emphasis on factors which may be influential in the redemption of coupons.

Statement of the Problem

The fast-paced marketing trends in the food industry warrant frequent studies and updates on coupon redemption (Coupon Distribution, March 1979; Matthews, May 1980; USDA, 1978; Linsen, February 1981). Consumers rate the use of cents-off coupons second on their list of most popular ways of economizing at the supermarket (FMI, March 1981). With coupon redemption on a continual increase since 1970 (NCH, 1981), and with 80% of American families using coupons (USDA, 1978), it is beneficial to review the role of cents-off coupons in the food industry. Prior to the introduction of computer-based scanning machines, it was almost

impossible for the food industry to monitor coupon redemption patterns in the grocery store (USDA, 1978).

Although the use of coupons as an advertising tool is controversial, the literature suggests that despite problems, the coupon is a very successful tool in the food industry (NCH, 1981; Supermarket News, December 1980; FMI, 1981). As with any advertising promotion tool, the success of coupons is measured through the profit generated. Despite the presence of opposing attitudes, whether they come from consumer groups, retail grocers, or from within the manufacturers, the literature suggests that cents-off coupons will continue to be a major marketing tool in the future (Matthews, May 1980). By using up-to-date technology with three grocery stores in different market areas, the researcher investigated coupon redemption patterns in the food industry.

Purpose

The initial purpose of this research was to assess the coupon redemption patterns in three grocery stores. The need for current data on the redemption patterns of cents-off coupons is important to the manufacturer of products, the retail grocer who sells those products, and the coupon user. In order to effectively promote current products and to introduce new products to consumers, manufacturers must rely on current coupon redemption patterns. Cents-off

coupons are a major marketing tool, and as coupon redemption rates continue to rise, any data reflecting couponing patterns are welcomed by manufacturers in planning future promotions.

Retail grocers may also find useful information from a cents-off coupon assessment. By evaluating the coupon redemption patterns of their particular market, retailers may better plan their advertisements in an effort to increase sales. They may also use knowledge about redemption patterns in planning in-store coupon promotions. Research on consumer shopping trends builds a confidence in consumers that shopping habits, needs, and wants are important to the business world. Presently, the increase in coupon redemption is a reflection of attitudes from the consumer which have resulted in coupons becoming a major method of advertising.

CHAPTER II

REVIEW OF LITERATURE

In the continuing promotion of cents-off coupons, it is important for all levels of the food industry to be aware of factors influencing coupon redemption today. This section reviews the influences on coupon redemption in the grocery store.

Food Industry Retailers and Coupons

Since coupons are defined as an inducement to buy, it was not surprising that retailers viewed coupons as an effective selling tool. The coupon performs two basic functions for the retailer. Coupon promotions build volume on the couponed product and, at the same time, draw traffic into the store. A typical grocery store redeemed 2,000 coupons each week in 1979, and this figure continued to increase during double-digit inflationary times (NCH, 1981).

Food Retailers' Negative Views

There were some major problem areas of couponing which retailers shared in the food industry. Not all grocer retailers agreed with double-couponing techniques. Michael Rourke of A & P Supermarket suggested that this competitive tool could be costly to retailers, and when all grocers in one area offered double-coupons, it was no longer a

competitive advantage to any of the retailers involved (Linsen, February 1981). Coupon handling costs and coupon misredemption were two prominent concerns to retailers.

Misredemption. Statistics on misredemption showed that approximately 75% of all coupon misredemption was done by organized criminal groups. The other 25% was misredeemed by unethical retailers, clearing houses, and new dealers. Misredemption ranged from retailers accepting expired coupons to redeeming coupons on unpurchased items. Misredemption at the checkout counter may have involved employees accepting coupons for items not purchased or a checker may have accepted a coupon on an out-of-stock item on a substitute product. These checkout counter misredemption practices often resulted in termination of employees (FMI, 1981). One authority estimated that about 3% of total coupon submissions were misredeemed (Linsen, February 1981). Coupon misredemption was a profitable crime with one fictitious grocery store set-up accumulating \$250,000 in a 3 year period (Valentino, May 1981). The food industry was attempting to reduce coupon misredemption.

Coupon Fraud. A non-profit enterprise, the Audit Bureau of Circulation, worked with the GMA in auditing coupon redemptions. The U.S. Postal Service had a special postal inspector who concentrated solely on coupon fraud.

In 1980, 172 coupon investigations were completed, with 94 arrests through the Postal Inspector's Office. These efforts, along with the help of clearing houses, helped the food industry to reduce coupon fraud (Linsen, February 1981). Coupon misredemption constituted fraud and was punishable by fine of not more than \$1,000, a prison sentence of not more than five years, or both (Valentino, May 1981).

Coupon handling costs. The second major concern to retailers was the handling cost of coupons. Coupon handling fees were recently raised from 5¢ to 7¢. To keep the handling costs current and geared to the economy, the retailers suggested a joint industry study. The FMI, GMA, and other industry organizations combined in an effort to remain updated on coupon handling costs and coupon patterns (Valentino, May 1981). GMA's James May, Vice President for Consumer Affairs, estimated the retailers' couponing costs to be less than half of 1% (Densford, August 1980).

Food Retailers' Positive Views

The GMA has supported coupons as an overall positive asset to retailers. Their major position is that coupons help to increase sales volume. This increase reduces cost per unit of the product which spreads the retailers' fixed costs of operation (Densford, August 1980). A National

Association of Retail Grocers (NARGUS) study (1978) showed that 48% of 433 retail grocers favored cents-off coupons above other means of promotion (FMI, March 1981).

Coupons and sales. Retailers welcomed coupon promotions since they generally increased sales without reduced prices. Through coupons, the retailer increased sales on products without special purchases or special displays. A successful coupon not only helped the manufacturer, the retailers sold more products with no extra effort on their part. Retailers also benefited from coupons through their promotion of good company image. "A good deal of goodwill and confidence can be indirectly associated with the retailer through the coupon" (FMI, March 1981). For a retailer, coupons become traffic builders that often enhanced their own advertising techniques.

Double-coupons. Some retailers added extra savings to coupon users at their stores by offering double-coupons promotions. The promotional idea of double-coupons developed as a method of increasing customer traffic and sales volume. Double-coupons allowed the customer to receive the face value on the manufacturer's coupon plus the retailer's matched face value offer. A 25¢ coupon would be worth 50¢ to a customer at a grocery store where double coupons was being offered. Wegmans,

a food chain in Buffalo, New York, used double-coupons as a competitive tool in their 25 scanning stores. The company felt the promotion gave their customers a tangible way to save at the grocery store checkout counter, according to Consumer Affairs Director Mary Ellen Burris (Linsen, February 1981).

Food Industry Manufacturers and Coupons

Coupons play two major roles as a marketing tool for manufacturers: to obtain new triers, encourage repeat purchases, and convert them to regular users; and to increase sales volume. Manufacturers have specific purposes for using coupons in promotions, which include introducing new products, attracting new buyers, entering a new market, broadening product distribution, and providing salespersons with an effective sales tool (NCH, 1981).

The first promotion by coupon occurred in 1895 for the health food Grape Nuts. C. W. Post of Battle Creek, Michigan came up with the idea for a certificate for 1¢ redeemable with the purchase of a box of his new cereal. Proctor and Gamble used coupons for the first time in 1927 (Grocer Spotlight, October 1978), with major purposes for introducing new products and merchandising of brands. Approximately 350 manufacturers were using coupons as a marketing tool in 1960, rising to over 1,000 companies

using coupons as a promotional means of advertising by 1980. With approximately 90 billion coupons distributed in 1980, experts predict that couponing trends would continue to rise (Linsen, February 1981).

Food Manufacturers' Negative Views

Food manufacturers were affected by some of the same negative issues as the retailers yet also experienced areas of concern unrelated to the retailers' view. The manufacturer wishing to use coupons as a marketing tool was vulnerable to complications ranging from consumer fraud, checker error, out of stocks, coupon columns, and coupon clubs. Even without considering the expense of misredemption, the effectiveness of a coupon promotion could not be accurately measured because of outside influences. Some authorities feel that couponing has turned into a game and the original purposes, such as brand loyalty, were lost when consumers began to buy any couponed item (FMI, March 1981).

Coupon misredemption and handling costs. The two most important problems with coupons for manufacturers have been discussed from the retailers' point of view: Misredemption and coupon handling costs (Matthews, May 1980). With 10 to 20% of all coupon transactions entailing misredemption, it is not unlikely that the original purpose of couponing was

somehow affected (FMI, March 1981). Though manufacturers continued to release more and more coupons and the consumers were redeeming more and more of them, manufacturers were still faced with the rising costs of coupon handling and misredemption. Grocery manufacturers needed to remain acutely aware of future retail supermarket store designs since inventories of their products would depend largely on warehousing and distribution of products (Buzzell, Cort, & Salmon, January-February 1974).

Coupon clubs. Coupon promotions have also been diminished by the exchange systems which coupon clubs use across the country. A couponed item which was meant to be used by consumers in one geographic area could become nationwide without the manufacturers' distribution. This nationwide coupon sharing among coupon clubs has caused some coupon promoters to print detailed information on coupons regarding states in which they are redeemable (Linsen, February 1981). The use of coupons in the promotion of products is now controlled by consumers who use them rather than the manufacturer who distributes them. Only tighter restrictions and limitations on these coupons will allow the manufacturer to once again effectively use coupons as a marketing tool (McGriff, April 29, 1979).

Coupon trading posts. Coupon trading posts were designed by retailers as a service for their customers.

Shoppers could bring in unwanted coupons to place in the trading post and select desired coupons. Though the trading posts were successful, they were not popular to manufacturers. As with the coupon clubs and syndicated coupon columns, the trading posts alter the effectiveness of the coupons. They are another factor which cause any redemption patterns or statistics to be less representative of the market under study (Elson, December 1980).

Retailer vs. manufacturer. Though couponing has proven to be an effective promotional tool, the food industry is quite divided on the issue of couponing. One of the most outspoken against manufacturers using coupons as a promotional is the food store chain, Giant Foods. The company is so anti-coupon oriented that they have released a 20 minute film entitled, "Coupons--Good Business or Bad Business?." The film includes the issues of coupons raising the price of products, coupon distribution being unfair to all markets, and fraud related to coupons. In response to Giant's nationwide campaign against coupons, the Grocery Manufacturers of America (GMA) voiced their pro-coupon issues (Densford, August 1980).

The coupon boom really began in 1970 and remains a predominant method for promoting products. One advantage of coupons, in contrast to other types of marketing tools,

was that few promotional tools work faster for increasing sales. In July 1980, the syndicated newspaper column, "Supermarket Shopper," supported coupons as a means of fighting inflation. The article addressed the special assistant for Consumer Affairs to the President of the United States, Esther Peterson. Peterson had recently spoken out against coupons with the stand that coupons were not fair to all consumers (Zimmerman, October 1980). The author invited the government to develop programs for those on food stamps which would teach them how to make use of cents-off coupons and make these available to them. Sloane felt this a much more reasonable approach to the couponing issue rather than opposing their purpose altogether.

Food Manufacturers' Positive Views

With the food retailing business one of the most competitive industries, manufacturers found coupons to be a popular marketing tool. With the average consumer visiting the grocery store twice a week, consumers are aware of the slightest price fluctuations, therefore making coupon redemption more appealing during inflationary times (Peterson, May-June 1974).

Coupons as a promotional tool. Proctor and Gamble, a company who has used coupons for over 50 years, relied on coupons as the best method for introducing new products.

Malcolm Sims, manager of relations for Proctor and Gamble, outlined the reasons that manufacturers find coupons such a good promotional tool. His information came from survey research from Nielson, Burgoyne, Progressive Grocer, and Proctor and Gamble. According to Sims, couponing is the most effective way to introduce a new or improved product, second only to free samples. Coupons also act as an excellent device for rewarding present product users and for encouraging larger quantity purchases by consumers (Matthews, May 1980). Coupons direct consumers to the product and then promote brand loyalty. By regularly issuing coupons on an established product, manufacturers encourage repeat purchases (FMI, March 1981). Coupons are also known for moving inventories at an increased rate which helps both manufacturers and retailers in reducing inventory costs (Matthews, May 1980).

Dr. George Gallup emphasized research in advertising to provide the most effective advertising tools to best fit a product. Couponing as a marketing tool was a result of such planning through advertising firms (Gallup, June 1974). According to a study by Grocer's Spotlight in May of 1980, couponing as a marketing tool had proven that the same amount of money spent by a manufacturer to reduce the shelf price of a product could not compare to the results

which a couponing promotion brings. Coupons are the best way that manufacturers have of offering customers a savings as incentive for buying their product (Gallup, June 1974).

Coupons as a liaison. Coupons also project an image to consumers which is a positive tie between the manufacturer and its customers. A sense of goodwill is generated and a bond of trust develops (FMI, March 1981). With the issue of coupons often being brought out as an extra advertising cost which consumers pay for, many manufacturers have a positive approach. Manufacturers are able to control their own product discounts by using coupons which eliminates the chance that a retailer may not pass on discounts to their customers (FMI, March 1981). In this aspect, manufacturers can directly offer savings to their product users. Manufacturers have found newspaper coupons to be the most effective in reaching consumers. Approximately 3 months after releasing coupons, 80.8% of all newspaper coupons to be redeemed had passed through the checkout. By the sixth month, 95% were turned in (NCH, 1981). These results proved to be a very fast redemption record for manufacturers looking for coupon results.

Consumers and Coupons

Regardless of the advantages and disadvantages of coupon use, government statistics show an increasing rate

of coupon redemption. The benefits of couponing have been subject to consumer acceptance of this marketing tool. The average family in the United States redeemed 70 coupons a year worth an average total of \$12.50 (USDA, September 1978). In the past, the majority of coupon users were middle and upper-income families.

The inflation-fighting coupon was aimed at a target customer. The typical coupon user was a 31-45 year old housewife from an upper-income family with 3 or more members. Each coupon redeemed had an average face value of about 18¢ (McGriff, April 29, 1979). John E. Arens, President of Coupon Clearing House of California, recently reported that today's coupon user was not only the typical 31-45 year old woman, but also elderly citizens, plus both sexes of all economic and ethnic groups. He narrowed the study results by stating that the wealthy and the poor were the least frequent coupon users (Valentino, May 1981). A recent study conducted by Empak Enterprises of Illinois supported the theory that more ethnic families were making use of coupons. Their study showed that more Black Americans were using coupons (FMI, March 1981).

Consumers' Negative Views

Even with the increase of coupon use to all levels of consumers, there are still setbacks which are voiced by

disheartened consumers. There is a sector of consumers who feel coupons are an added expense on their food budget whether or not they make use of coupons.

Consumers' cost of couponing. The most common complaint by consumers with coupons continues to be the concept of rationalizing that if the food industry can afford the promotion cost of coupons, then why can't the prices on all products be reduced and coupons eliminated? This theory removed responsibility for saving from the consumer since coupon clipping would not be necessary in order to save money. With coupons, savings were restricted to those who used them. Those consumers who did not use coupons argued that they still paid for them (FMI, March 1981).

Coupon formats. Even consumers that did clip coupons had their complaints. Coupons could be very complicated to redeem, especially with a hard-to-find expiration date, an odd purchase requirement, or complicated language. With such a small area for printing, it was easy to miss an important requirement or statement. These small print restrictions could breed negative attitudes from consumers toward promotions (NCH, 1981).

Consumers' Positive Views

Basically, most consumers seem to like coupons. With current inflationary times, many consumers welcome coupons

as a quick, real way to save on their total food bill. The Nielsen Clearing House survey of 1980 reported the level of coupon use increased as the family income increased and as the expenditure for groceries increased (NCH, 1981).

These coupon trends explained the continuing increase in the use of coupons as inflation continued to rise (Marton, March 1980). Coupons also allowed customers to try new products at a cheaper price. The coupon for a new product may have influenced a consumer to purchase a new item, whereas an advertisement might not have (Bearden, Teel, & Williams, March 1980).

Coupon experts. Consumers that become coupon experts report substantial savings at the grocery check-out. A bill of \$130.18 in groceries cost one coupon clipper \$7.07 after coupons were deducted. This coupon clipper authored a book on how to reduce food bills between 40 and 60% when using the supershopping system (Samtur, 1979). A recent survey by Bon Appetit magazine indicated that 95% of its readers felt quality was more important than price, yet 52% also said that cents-off coupons affected their brand choices (FMI, March 1981).

Future coupon users. A study by Bearden, Teel, and Williams (March 1980) found that coupon-susceptible consumers differed from never-influenced consumers. They

found that the shopper was younger, had a greater income, and was responsible for a larger family. This shopper was more concerned with spending the grocery dollar wisely and appreciated coupon promotions. All the studies addressed the same issue--to clip or not to clip coupons. In general, those consumers who clipped coupons were more price-conscious and budget-minded. The authors concluded that coupons were destined to be a strong marketing tool as long as consumers continued to redeem them in an effort to fight inflation (Marton, March 1980).

Food Industry Scanning Systems and Coupons

A positive approach toward reducing misredemption and fraud with cents-off coupons came with scanning registers. As early as 1978, 85% of the products in the grocery stores were carrying the Universal Product Code (UPC) bars which allowed the progress of scanning technology to continue ("Breaking the Code," March 6, 1978). The scanning registers consist basically of a scanner beam which reads the UPC number from the item. The scanner is connected to a computer which records the price of the item on the register (Sobezak, December 1975). It was estimated that 8,000 installations for scanning registers would be made by 1982 ("Breaking the Code," March 6, 1978).

Scanning benefits. For manufacturers, retailers, and consumers, the scanning register offers several benefits in

relation to coupons. Scanning streamlines the redemption process of coupons and insures faster, more accurate redemptions. This streamlining means lower counting and sorting costs for both retailers and manufacturers (USDA, September 1978). With coupons scannable, the possibility of a retailer profiting from coupon fraud would be greatly reduced. Coupon handling costs for retailers would also be less with the registers taking over the once manual labor of couponing redemption at the checkstand. Scannable coupons would also help speed-up checkout time for consumers. The checkers would not have to key-in each coupon as is presently done (Greenwald, November 1980).

The food industry has continued to look for ways of eliminating coupon fraud and misredemption. With no immediate solutions, the food industry is looking to the future of scanning registers in grocery stores as their possible key to the most effective means of handling cents-off coupons (Marton, February 1980).

Future of scanning. Consumer advocates foresee the computer-based scanning systems as a consumer information system assisting consumers with purchasing decisions and allowing package information to be readily accessible to shoppers (Friedman, Summer 1977). Though scanning is a positive system for the future, part of its slow growth

rate is due to the expense for installation. Installing a scanning system typically ranges from \$100,000 to \$150,000 for a ten checkstand store (USDA, September 1978).

Scannable coupons. The food industry has experienced some problems with the promotion of scannable coupons. UPC patent rights were under dispute. Experimental programs have been begun by Pillsbury, General Foods, and Ralston Purina. The future of scannable coupons is in the hands of the food industry (Rauch, December 1979). There must be a cooperative approach from every group involved. Scannable coupons may someday be capable of carrying code numbers which must match the product code numbers. Coupon validation on a product would be automatically checked through the scanning register system (Elson, May 1980).

Future of Coupons in the Food Industry

Coupons in the future will be subject to many factors which only time will reveal. Inflation is a strong incentive for consumers to make use of cents-off coupons, so as long as inflation rates continue to climb, so will the popularity of coupons (FMI, March 1981). As misredemption and fraud groups are apprehended and broken up, the threat of coupons no longer being the most effective marketing toll will diminish. With a more efficient coupon handling system in the future and with continued consumer demand,

coupons are the food industry's best marketing tool for the future. The industry must be alerted to consumerism movements and trends from which will emerge the mature participative consumer with a need for consumer education and information.

This new consumerism offers businesses and consumers the opportunity to better understand each other's views (Bloom & Greyses, December 1981). To remain effective, the manufacturers will have to keep abreast of the ever-changing market which they are attempting to reach. It is speculated that the next 10 to 20 years will yield a new supermarket shopper. There will be more elderly, more working women, more male shoppers, more singles, more two-income households, and more smaller households (Valentino, May 1981).

Methods of distribution. Even though coupons are expected to continue in popularity, the methods of distribution are apt to change. Edward Meyer of Daner F Sample Promotional Services, said to prepare for clipping coupons from television rather than from newspapers. Home computers attached to printing devices might be used to offer viewers coupons in the late 1980s (Linsen, February 1981). A new concept for reaching customers had been implemented with Montgomery Ward and J. C. Penney Company.

In conjunction with Couponing Group of New York,

both department stores agreed to insert an envelope containing cents-off coupons in their fall-winter catalogs. Though the coupons were for non-food related items which were not redeemable at their own stores, both Montgomery Ward and J. C. Penney Company shared in the coupon redemption profits from the promotions ("J. C. Penney to Insert Coupons in its Catalog," January 14, 1981). The future of cents-off coupons in the food industry depends upon the industry working together in solving problem areas and in developing an overall efficient couponing promotion that benefits all three groups: manufacturers, retailers, and consumers (FMI, March 1981).

Coupon trends. Couponing in the food industry was a \$4 billion advertising promotion in 1979, a result of a 15 year couponing boom ("How Coupon Promotions Can Affect Sales," September 25, 1980). With over 3 billion coupons redeemed in 1979, the coupon redemption was expected to grow 10-15% each year (NCH, 1981). In relation to total grocery store sales, two coupons were redeemed per every \$100 of grocery sales (NCH, 1981). The use of coupons doubled from 1975 to 1978. Manufacturers distributed 727 billion coupons in 1978 (FMI, March 1981). The success story of redeeming records of coupons had encouraged the number of manufacturers using coupons to go from 350 in

1960 to over 1,000 by 1980 (Linsen, February 1981). Over one-half of all coupons issued were redeemed within one month of the issue date (NCH, 1980).

FMI prepared a paper in March 1981 entitled "The Pros and Cons of Cents-Off Coupons--The One and One-Third Billion Dollar Question" in an attempt to summarize both the benefits and problems of coupons. This report reviewed coupons from three aspects: manufacturers, consumers, and distributors. The report stated that the use of coupons as a promotional technique had continued to be successful because of a change in the industry. Though manufacturers still directly yielded benefits, couponing had become a public issue. With the increased face value of coupons, the increase of distribution methods, and the increasing number of manufacturers issuing coupons, the Food Marketing Institute speculated that the "couponing fever" of the 1980s would continue in the future (FMI, March 1981).

CHAPTER III

PROCEDURES

The descriptive data concerned with coupon redemption in the grocery store were obtained from in-store computers. Coupon data, sales, customer count, and individual store demographics were obtained during a selected week. The scanning register director of the food chain assisted with data collection for this research.

Data Base

The data obtained for this descriptive study were accumulated from the three in-store computers of the grocery stores. The in-store computers were connected to scanning system registers at the stores. By obtaining the data from computers, the need for involvement of human subjects was eliminated. Information obtained included hourly, daily, and weekly totals as well as an itemized computer sheet of each coupon redeemed through any register. The descriptive study obtained research data for the three stores related to sales and coupon totals.

Population Profile

Three cities in the Dallas-Fort Worth, Texas area were selected: Arlington, Irving, and Richardson. Population statistics of each regional area were used in

distinguishing the three grocery store markets. These statistics involve both regional population information and data on each store. This study was not concerned with individual customer's profiles; rather it was concerned with coupon redemption in relation to grocery purchases. The regional population data were obtained from the most recent United States Census. The population profiles were representative of the test markets for this research.

Description of Findings

From the three food stores involved in this research, data were obtained to determine coupon redemption patterns relative to sales volume. During a one week period, total sales volume per week and per day was obtained along with coupon dollar totals. The highest volume sales day information obtained from the three store computers had hourly totals in sales and in coupon redemption totals. The coupons redeemed were cents-off coupons which were released as market promotions by food manufacturer. Both dollar values and quantities of coupons redeemed were obtained from the in-store computers. All coupon data were reported in relation to customer counts and sales volume within the target research week.

Definition of Terms

Definitions of terms related to coupon redemption as used in this paper are:

Coupon--a part of a printed advertisement designed to be redeemed for cash.

Coupon handling cost--a fee which is paid to the retailer by the manufacturers for each coupon redeemed; the fee acts as reimbursement to the retailer for the time involved in handling a coupon.

Coupon redemption--the redeeming or turning-in of a coupon in order to receive promoted savings; process of a coupon being used including redemption at store by consumers and the reimbursement to retailers from manufacturers for face value of the coupon plus handling costs.

Customer Count--the number of customers which purchase products through the check-out in a designated period of time.

Double and triple couponing--a promotional tool used in highly competitive markets in which the store redeeming a coupon will double or triple the face value of the coupon.

HVSD--abbreviation for Highest Volume Sales Day which is the day with the highest dollar sales for the week researched.

In-store coupon--a coupon which is designed and distributed by a single store operation, usually included

in the store's newspaper advertisement.

Manufacturer's coupon--a coupon which is designed for promoting a product through national advertisement in newspapers and magazines.

Net Sales--the total product sales (gross sales) with the tax and bottle deposits subtracted.

Scanning system--computer-based cash register which operates by a laser light using the Universal Product Code.

CHAPTER IV

RESULTS

This chapter contains four sections describing the research findings: store profiles, advertising, sales, and coupon redemption patterns. Research findings include data analysis of sales volumes, coupon redemption patterns, and customer counts which were observed hourly, daily, and weekly.

Store Profiles

The three grocery stores involved in the study will be identified throughout the report as:

<u>Store Identification</u>	<u>Store Location</u>
Store A	Irving, Texas
Store B	Richardson, Texas
Store C	Arlington, Texas

Table 1 illustrates profiles of the grocery stores involved in the study. All three stores were owned and operated by the same food chain at the time the research was conducted. The stores were 32,000 square feet or more and operated 24 hours a day, 7 days a week.

The three grocery stores were considered to be relatively new store locations since all were under 10 years old. Store A had been in operation for 8 years, making

Table 1
Store Profiles

Categories	Store A	Store B	Store C
Location	Irving, Texas	Richardson, Texas	Arlington, Texas
City Population 1980 Census Report	109,943	73,496	160,113
Years Store in Business	Opened 2-17-74 8 years	Opened 10-14-78 4 years	Opened 11-1-80 2 years
Operating Hours	24 hours 7 days week	24 hours 7 days week	24 hours 7 days week
Square Footage	32,000	32,115	33,400
Number of Weekly Customers	2,094	1,554	1,850
In-store Couponing Programs	Coupon Exchange Center	Coupon Exchange Center	Coupon Exchange Center

it the oldest store of the three. Store B was almost 4 years old, and Store C had not yet been in operation 2 full years. The number of years in which the stores had been in operation was variable as well as the population figures. This population variance did not account for the difference in the number of weekly customers in each store. Store C had the highest populated city, yet Store A's weekly customer count was higher than Store C. The population of the city did not correlate respectively to each store's customer average. In order of highest to lowest, the geographic population was Store C, A, and B. The weekly customer counts were in order of Store A, C, and B with A having the highest customer count.

The selection of these three specific grocery stores was directly related to the method of obtaining research data. The three stores were locations where computer based scanning registers were in operation. Data related to coupon redemption and store sales were obtained from each store's computer.

As shown in Table 1, information related to the population of the three geographic locations was obtained from the 1980 United States Census Report. Arlington was the largest population region with over 150,000 people. The

Irving region was just under 110,000 people, and Richardson was less than 75,000.

Each of the grocery stores had in-store coupon exchange centers. These centers were developed for consumers to contribute coupons to the center and to take out any coupons which the consumer may wish to use. The coupon exchange centers were maintained in categories for easy use and supplemented with coupons from newspapers and magazines when needed. The data for the research did not distinguish between coupons used from the in-store coupon exchange centers and coupons brought in by consumers.

Advertising

The three grocery stores involved in this study had the same weekly advertisement for the time period in which the data were obtained. There were no individual in-store promotions for the week of March 1 through March 7. The advertisement which was effective during the target week was a conventional weekly advertisement which appeared in the major area newspapers: The Dallas Times Herald, The Dallas Morning News, and the Fort Worth Star-Telegram. The week chosen for the research was considered to be representative of the type advertisement which would be typical for the food chain involved. The week researched had no sweepstakes, anniversary contests or promotionals of any kind.

At the time of the study, cents-off coupon distribution by manufacturers was handled through major newspapers and women's magazines. The Thursday food sections of the major newspapers featured manufacturers' cents-off coupons and the Sunday papers included a coupon supplement. This supplement offered consumers cents-off coupons on products available at the grocery stores. The stores had advertisements which began on Sunday and ended the following Saturday. This was the regular advertising schedule for the stores involved.

Description of Sales

The sales figures in the research are the stores' net sales volume which best describe the actual sales. Net sales are total product sales with tax and bottle deposits subtracted. The highest volume sales day (HVSD) describes the one day out of the research week which has the highest dollar value in sales. The hourly sales reports from the HVSD are dollar amounts which have been rounded to the nearest whole dollar. This whole dollar figure is the way in which the scanning register director for the stores received sales figures from the computers. The HVSD hourly data focuses on the 12 hour time period from 10 a.m. to 10 p.m. This time span was selected as the best time for coupon redemption data by the food store scanning register director.

The data had similarities within each store's sales volume. Store A maintained the highest sales figures among the 3 stores in every area (Tables 2, 3, and 4). Store C maintained the second highest sales figures with Store B carrying the lowest sales throughout the research. Customer counts also correlated to the order of sales figures. The store with the highest sales volume also had the highest customer counts (Table 2). The highest volume sales day was the same day (Saturday, March 6) for all three stores.

Description of Store A Sales

For the week studied, Store A had sales totaling \$227,318. The daily sales ranged from \$21,000 to \$50,000. Store A's HVSD was Saturday which totaled \$50,419. Table 2 illustrates Store A's Saturday sales by the hour. The hour with the highest sales volume was from 5 to 6 p.m. with \$5,769. The hour with the lowest sales was 9 to 10 p.m. with \$1,332. Table 3 shows the weekly customer count was 14,657 and the customer count for Saturday was 2,524 which was the highest number of customers for one day's sales. The average customer purchase for the week at Store A was \$15.50 and \$19.97 for Saturday. Table 4 reveals the highest and lowest sales days for the week researched.

Table 2
Highest Volume Sales Day Profile

Time of Day	Hourly Sales Figures			
	Store A	Store B	Store C	
10:00-11:00	\$ 3,200	\$ 2,065	\$ 1,704	
11:00-12:00	3,174	2,696	2,706	
12:00- 1:00	3,794	2,662	3,603	
1:00- 2:00	4,337	2,931	3,720	
2:00- 3:00	3,986	4,628	3,422	
3:00- 4:00	4,865	3,660	4,019	
4:00- 5:00	5,041	3,775	4,382	
5:00- 6:00	5,769	3,792	4,158	
6:00- 7:00	4,739	2,689	3,389	
7:00- 8:00	3,854	2,090	3,109	
8:00- 9:00	2,373	1,520	1,945	
9:00-10:00	1,332	883	1,286	
	<hr/>	<hr/>	<hr/>	
	\$46,464	\$33,391	\$37,443	Sales Total

Table 3
Average Customer Purchase (Store A)

Day	Sales \$	Customer Count	Average Customer Purchase
Monday	\$ 23,970	1980	\$12.10
Tuesday	21,816	1782	12.24
Wednesday	25,772	1904	13.53
Thursday	25,950	1872	13.86
Friday	36,934	2030	18.19
Saturday	50,419	2524	19.97
Sunday	42,457	2565	16.55
Weekly Total	\$227,318	14657	\$15.50

Table 4
Sales Profiles

Day	Store A \$ Sales	Store B \$ Sales	Store C \$ Sales
Sunday	\$42,457	\$27,213	\$32,355
Monday	\$23,970	\$16,853	\$23,107
Tuesday	\$21,816	\$16,562	\$21,129
Wednesday	\$25,772	\$19,617	\$22,087
Thursday	\$25,950	\$18,715	\$22,736
Friday	\$36,934	\$27,698	\$32,665
Saturday	\$50,419	\$35,115	\$41,210

Description of Store B Sales

For the target week, Store B had sales totaling \$161,773. The daily sales ranged from \$16,000 to \$33,000. Store B's HVSD was Saturday which totaled \$35,115. Table 2 illustrates Store B's Saturday sales by the hour. The hour with the highest sales volume was from 2 to 3 p.m. with \$4,628 in sales. The hour with the lowest sales was 9 to 10 p.m. with \$883. Store B's weekly customer count was 10,880 and the total customers count for Saturday was 1,961. The Average Customer Purchase data on Table 5 shows \$14.86 for the weekly average customer purchase. The table also shows Saturday to have the highest average customer purchase for the week at \$17.90. Table 4 provides the highest and lowest sales days during the week under research.

Description of Store C Sales

For the research week, Store C had sales totaling \$195,289. The daily sales ranged from \$21,000 to \$37,000. Store B's HVSD was Saturday which totaled \$41,210. As illustrated in Table 2, the hourly Saturday sales show 4 to 5 p.m. as the highest volume sales hour with \$4,382. The hour with the lowest sales was 9 to 10 p.m. with sales totaling \$1,286. Store C's weekly customer counts as well as customer purchase averages appear on Table 6. The

Table 5

Average Customer Purchase (Store B)

Day	Sales \$	Customer Count	Average Customer Purchase
Monday	\$ 16,853	1361	\$12.38
Tuesday	16,562	1378	12.01
Wednesday	19,617	1447	13.55
Thursday	18,715	1390	13.46
Friday	27,698	1555	17.81
Saturday	35,115	1961	17.90
Sunday	27,213	1788	15.21
Weekly Total	\$161,773	10880	\$14.86

Table 6
Average Customer Purchase (Store C)

Day	Sales \$	Customer Count	Average Customer Purchase
Monday	\$ 23,107	1647	\$14.02
Tuesday	21,129	1695	12.46
Wednesday	22,087	1691	13.06
Thursday	22,736	1734	13.11
Friday	32,665	1804	18.10
Saturday	41,210	2258	18.25
Sunday	32,355	2118	15.27
Weekly Total	\$195,289	12947	\$15.08

weekly customer count was 12,947 with Saturday's customer count 2,258.

The target week for Store C had an average customer purchase of \$15.08. Saturday, the HVSD, had the highest customer purchase average for the week which was \$18.25. Store C's Store Profile, Table 4, reveals the sales with Saturday the HVSD and Tuesday the lowest volume sales day.

Description of Coupon Redemption Patterns

The dollar figures related to coupon redemption in this study are reported in exact dollar amounts. Coupon redemption patterns were assessed in exact dollar amounts for the three stores. The HVSD coupon redemption patterns are described in exact dollar figures and in exact quantities. Table 7 shows the dollar value of coupons redeemed including daily totals and a weekly total.

The coupon redemption patterns correlated to the sales figures. Store A, with the highest sales figures, also maintained the highest number of coupons redeemed. Store C ranked second in the number of coupons redeemed as it had in sales volume. Store B followed third in total number of coupons redeemed.

Coupon Redemption at Store A

Store A redeemed \$548.71 in cents-off coupons during the week studied. The daily amounts ranged from

Table 7
Coupon Redemption
Daily Figures

Sales Day	Store A	Store B	Store C
Monday	\$ 54.71	\$ 68.66	\$ 67.17
Tuesday	52.35	59.34	48.07
Wednesday	62.99	62.78	71.43
Thursday	59.45	74.01	83.78
Friday	99.79	78.11	97.93
Saturday	124.41	87.16	150.12
Sunday	95.01	78.40	92.48
7 Day Totals	\$548.71	\$508.46	\$610.98

approximately \$53.00 to \$125.00. Store A's highest coupon redemption day was Saturday which totaled \$124.41.

Table 8 demonstrates both the dollar figures and the number of coupons redeemed hourly on the HVSD. Between the hours of 10 a.m. and 10 p.m., Store A redeemed \$115.00 of the total days \$124.41 coupon total. The hour with the highest dollar value of coupons redeemed was 5 to 6 p.m. with \$15.52. The hour with the lowest dollar value in coupons redeemed was 9 to 10 p.m. with 25¢. Store A redeemed 458 coupons on the HVSD, and the hour in which the most number of coupons were redeemed was 5 to 6 p.m. with 60 coupons. The hour with the lowest number of coupons redeemed was 9 to 10 p.m. with two coupons.

Coupon Redemption at Store B

A total of \$508.46 in cents-off coupons were redeemed at Store B during the target sales week. The daily amounts ranged from \$59.00 to \$73.00. Store B's highest coupon dollar day was Saturday which totaled \$87.16. Table 9 demonstrates both the dollar figure and quantities of coupons redeemed hourly on the HVSD. Within the HVSD 12 hour target time period, Store B redeemed \$72.96 of the total redemption amount of \$87.16. The hour with the highest dollar value of coupons was 2 to 3 p.m. with \$11.87. The hour with the lowest dollar value in coupons redeemed was

Table 8
Highest Volume Sales Day Coupon Redemption Patterns
(Store A)

Time of Day	Number of Coupons Redeemed	Dollar Figures of Coupons Redeemed	Hourly Sales Figures
10:00-11:00	46	\$ 10.54	\$ 3,200
11:00-12:00	11	5.10	3,174
12:00- 1:00	71	15.38	3,794
1:00- 2:00	34	8.69	4,337
2:00- 3:00	53	13.31	3,986
3:00- 4:00	34	8.08	4,865
4:00- 5:00	54	12.08	5,041
5:00- 6:00	60	15.52	5,769
6:00- 7:00	46	15.27	4,739
7:00- 8:00	16	4.01	3,854
8:00- 9:00	31	6.77	2,373
9:00-10:00	2	.25	1,332
Totals	458	\$115.00	\$46,464

Table 9-
Highest Volume Sales Day Coupon Redemption Patterns
(Store B)

Time of Day	Number of Coupons Redeemed	Dollar Figures of Coupons Redeemed	Hourly Sales Figures
10:00-11:00	24	\$ 5.16	\$ 2,065
11:00-12:00	34	6.79	2,696
12:00- 1:00	20	5.31	2,662
1:00- 2:00	34	8.51	2,931
2:00- 3:00	43	11.87	4,628
3:00- 4:00	50	11.06	3,660
4:00- 5:00	29	5.95	3,775
5:00- 6:00	13	3.70	3,792
6:00- 7:00	27	6.68	2,689
7:00- 8:00	14	3.12	2,090
8:00- 9:00	9	2.83	1,520
9:00-10:00	6	1.98	883
Totals	303	\$72.96	\$33,391

9 to 10 p.m. with \$1.98. Store B's total number of coupons redeemed on the HVSD was 303 coupons. The hour in which the most number of coupons were redeemed was 3 to 4 p.m. with 50 coupons. The hour with the least number of coupons redeemed was 9 to 10 p.m. with six coupons.

Coupon Redemption at Store C

The third store of the study redeemed \$610.98 in cents-off coupons during the week researched. The daily dollar amounts ranged from \$48.00 to \$111.00. Store C's highest coupon dollar day was the HVSD, Saturday. As shown in Table 10, the dollar amounts and the quantities of coupons redeemed hourly were reported with Store C redeeming \$111.72 of the total dollar amount of \$150.12 in coupons redeemed. Within the 12 hour time period of the study on the HVSD, the highest dollar value in coupons was redeemed between 6 and 7 p.m. with \$19.07. The lowest dollar value in coupons redeemed was \$1.55 at 9 to 10 p.m. Store C redeemed a total of 425 coupons on the HVSD with the highest number redeemed between 6 and 7 p.m. with 65 coupons. The hour of 9 to 10 p.m. had the lowest number of coupons redeemed with a low eight coupon count.

Coupon Redemption Profile Comparisons

The Highest Volume Sales Day Profile in Table 11 compares the 3 grocery stores by customer counts, coupon

Table 10

Highest Volume Sales Day Coupon Redemption Patterns

(Store C)

Time of Day	Number of Coupons Redeemed	Dollar Figures of Coupons Redeemed	Hourly Sales Figures
10:00-11:00	27	\$ 7.37	\$ 1,704
11:00-12:00	35	7.42	2,706
12:00- 1:00	43	10.38	3,603
1:00- 2:00	34	9.34	3,720
2:00- 3:00	53	12.26	3,422
3:00- 4:00	26	7.32	4,019
4:00- 5:00	45	10.70	4,382
5:00- 6:00	38	10.64	4,158
6:00- 7:00	65	19.07	3,389
7:00- 8:00	39	12.85	3,109
8:00- 9:00	12	2.83	1,945
9:00-10:00	0	1.55	1,286
Totals	425	\$111.72	\$37,443

Table 11

Highest Volume Sales Day

Categories	Store A	Store B	Store C
Highest Volume Sales Day	Saturday	Saturday	Saturday
Customer Count	2,524	1,961	2,258
Total Number Coupons Redeemed	458	303	425
Sales Volume	\$46,464	\$33,391	\$37,443
Total Dollar Figure of Coupons Redeemed 10 a.m. to 10 p.m.	\$115.00	\$72.96	\$111.72
Total Dollar Figure of Coupons Redeemed 24 hours	\$124.41	\$87.16	\$150.12

totals, and sales. Store A had the highest total number of customers from 10 a.m. to 10 p.m. on Saturday, redeeming 458 coupons totaling \$115.00. There was \$9.41 difference between the total amount of coupons redeemed all day Saturday and the total dollar figure from 10 a.m. to 10 p.m. Store A maintained the highest customer count and total sales within the 12 hour period.

Store C was second to Store A in all categories in Table 11. Store C had \$38.40 in coupons redeemed outside the \$111.72 redeemed during the target 12 hour period. With 2,258 customers, Store C redeemed 425 coupons within the target time period. Following third in all categories, Store B redeemed \$72.96 in coupons, a total of 303, with \$14.20 in coupons redeemed outside the twelve hours researched hourly.

As shown in Table 12, Store A had a total of 1,871 coupons redeemed in a 7 day period with a dollar value of \$548.71. Store C redeemed \$610.98 worth of coupons with 1,796 coupons. Store B redeemed 1,599 coupons during the target week, totaling \$508.46. These results directly indicate a correlation of sales volume to coupon redemption patterns, both in quantity and dollar value.

HVSD Customer Coupon Averages

Customer coupon averages were figures for the HVSD during the 12 hour target period for the three stores. The

Table 12

Daily Coupon Redemption Patterns

Store A			Store B			Store C		
Day of Week	Number of Coupons Redeemed	Dollar Figures of Coupons Redeemed	Day of Week	Number of Coupons Redeemed	Dollar Figures of Coupons Redeemed	Day of Week	Number of Coupons Redeemed	Dollar Figures of Coupons Redeemed
Monday	223	\$54.71	Monday	239	\$68.66	Monday	225	\$67.17
Tuesday	189	52.35	Tuesday	172	59.34	Tuesday	146	48.07
Wednesday	227	62.99	Wednesday	215	62.78	Wednesday	226	71.43
Thursday	186	59.45	Thursday	243	74.01	Thursday	258	83.78
Friday	297	99.79	Friday	282	78.11	Friday	243	97.93
Saturday	458	124.41	Saturday	303	87.16	Saturday	425	150.12
Sunday	291	95.01	Sunday	145	78.40	Sunday	273	92.48
Totals	1871	\$548.71	Totals	1599	\$508.46	Totals	1796	\$610.98

averages were rounded to the nearest whole cent. The customer coupon averages did not correlate to sales volume and coupon redemption patterns. The averages were determined from customer counts which do not distinguish between coupon users and nonusers.

In total dollar amounts of coupons redeemed, the order followed sales and coupon quantities with the stores ranking in order of Store A, Store C, and Store B. The Saturday data did not show any correlations between hourly sales, dollar amounts of coupons, number of coupons redeemed, and the time of day. Store A's highest sales hour, 5 to 6 p.m., was also the time in which the highest number of coupons were redeemed as well as the highest dollar amount in coupons. Stores B and C did not follow this pattern. Store B's highest volume hour on Saturday was 2 to 3 p.m. This hour was also the highest dollar amount in coupons redeemed. However, the highest quantity of coupons redeemed was between 3 and 4 p.m. Store C's highest volume hour was 4 to 5 p.m., yet the highest number of coupons redeemed and the highest coupon dollar amount were between 6 and 7 p.m.

Customer Coupon Average Store A

Store A had a total customer coupon average on the HVSD of 5¢ as shown in Table 13. The highest average was

Table 13

Highest Volume Sales Day Customer Coupon Averages

(Store A)

Dollar Figures of Coupons Redeemed	Hourly Customers Count	Customer Average on Dollar Amount of Coupons Redeemed
\$ 10.54	142	\$.07
5.10	159	.03
15.38	172	.09
8.69	171	.05
13.31	173	.08
8.08	197	.04
12.08	234	.05
15.52	276	.06
15.27	238	.06
4.01	209	.02
6.77	147	.05
.25	90	.003
Totals \$115.00	2,208	
Average		\$.05

from 12 to 1 p.m. with 9¢. The lowest customer coupon average was three hundredths of a cent during the 9 p.m. to 10 p.m. hour.

Customer Coupon Average Store B

Table 14 shows customer coupon averages for Store B. The total customer average for the HVSD 12 hours researched was 4¢. The highest average was between 2 and 3 p.m. at 7¢ with the lowest customer coupon average at 3¢. The lowest customer coupon average was shared by the following hours: 4 to 5 p.m.; 7 to 8 p.m.; 8 to 9 p.m.; and 9 to 10 p.m.

Customer Coupon Average Store C

As shown in Table 15, Store C had the highest total customer coupon average of the three stores at 6¢ for the 12 hour period on the HVSD. As with Store A, Store C's highest hourly customer coupon average was 9¢. For Store C this came at 6 to 7 p.m. Store C had a low customer coupon average of 1¢ between 9 and 10 p.m. Store C, which had rated second in sales volume totals and coupon redemption rates, had the highest customer coupon average among the three stores. Store A, which was first in sales and coupon redemption figures, was second in customer coupon averages. Store B maintained third rating with customer coupon averages as it had throughout the research findings.

Table 14

Highest Volume Sales Day Customer Coupon Averages

(Store B)

Dollar Figures of Coupons Redeemed	Hourly Customers Count	Customer Average on Dollar Amount of Coupons Redeemed
\$ 5.16	107	\$.05
6.79	138	.05
5.31	127	.04
8.51	135	.06
11.87	183	.07
11.06	181	.06
5.95	185	.03
3.70	234	.02
6.68	178	.04
3.12	114	.03
2.83	90	.03
1.98	76	.03
Totals \$72.96	1,748	
Average		\$.04

Table 15

Highest Volume Sales Day Customer Coupon Averages

(Store C)

Dollar Figures of Coupons Redeemed	Hourly Customers Count	Customer Average on Dollar Amount of Coupons Redeemed
\$ 7.37	107	\$.07
7.42	115	.07
10.38	172	.06
9.34	164	.06
12.26	153	.08
7.31	185	.04
10.70	211	.05
10.64	241	.04
19.07	209	.09
12.85	174	.07
2.83	141	.02
1.55	109	.01
Totals \$111.72	1,981	
Average		\$.06

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Through examination of the data collected during one week from three grocery stores, assumptions related to sales and coupon redemption are applicable. Although findings are limited to the data from the three stores, coupon redemption patterns for the three geographic areas involved are suggested.

Summary

This descriptive study of three grocery stores used only a small portion of the information which is readily available directly from in-store computers. Businesses can benefit from this type of data analysis which could help improve productivity and improve consumer service. The technology of computer-based scanning registers facilitates research on a wide range of grocery store operations. Both education and business can cooperatively gain from such data and research.

The research obtained for the three grocery stores revealed some consistencies within the store operations. For all three stores, the highest volume sales day was the same, Saturday. The three stores also had the same highest coupon redemption day (Saturday), both in quantity and

dollar value. The store with the highest volume sales also had the highest coupon redemption patterns. This pattern included both coupon dollar amounts and the number of coupons redeemed. The three stores also had similar patterns of correlation of sales to coupon redemption. Store A had the highest sales and the highest coupon redemption totals. Store C was second in sales and coupon redemption. Store B was the lowest in sales and couponing figures.

The three stores shared in the hourly sales and coupon redemption patterns for the hour of 9 to 10 p.m. The lowest sales figures and the lowest coupon redemption patterns in terms of dollar amounts and quantity were reported at this time for all three stores.

Though the research is a descriptive study with limited data, it does address and establish the correlation of coupon redemption to store sales volume. There was a consistency of an increase in coupon redemption dollar amounts as the sales volume increased. The coupon redemption patterns varied widely within each store yet the findings suggest that cents-off coupons are a method for consumers to save on the total food bill. Retail grocer's can see by this research how coupon redemption relates to store sales volume. Manufacturers can also better

plan coupon promotion techniques with the coupon redemption patterns revealed, and consumers can become aware of store operating information by relating sales and coupon use to determine best shopping times.

With the assistance of the computer-based scanning register, the manufacturers, the retail grocer, and the consumer can benefit from information relating to coupon redemption in the food industry.

Conclusions

This descriptive study which made use of data obtained from computer-based scanning systems has value both to the food industry and to education. The types of information available from in-store computers may be beneficial to both business operations and advanced education. With computer-based data available for research, the food industry and educational research studies may benefit from the technological tool of scanning systems in the grocery store.

Retailers

Retailers benefit from descriptive studies such as this since the findings are directly related to the stores' operation. For instance, the coupon redemption patterns of the three stores in this research determined the highest and lowest use of coupons during the selected 12 hours.

The scanning system in the grocery store has the capacity to assist retailers in several areas of the store operation. Retailers were able to establish HVSD along with hourly customer counts from the data for this research. Retailers could readily see the high traffic times of the day and the way in which they corresponded to coupon redemption patterns. A retailer considering double-coupons for a promotional method of increasing customer traffic might find this study beneficial in determining the day and times to promote double-coupons. To balance hourly customer counts, the retailer could offer double-coupons during lower customer traffic hours.

Manufacturers

Manufacturers of coupons might welcome descriptive studies in the interest of evaluating regional coupon redemption patterns. As a marketing tool, a coupon might be high in total redemption yet may not show the same redemption rates in various regional areas. With the assistance of scannable coupons, manufacturers could work with retailers in monitoring a specific coupon and its product in an effort to determine redemption and purchase patterns. The scannable coupon will help to reduce misredemption of coupons.

Through the use of the store computer, the retailer and manufacturer could receive data on the number of

couponed items purchased and the number of coupons redeemed. Misredemption would be a possible factor if the number of items purchased was less than the number of coupons redeemed. Manufacturers would also be able to prevent misredemption of expired coupons through the scannable coupon. The expired coupon would not scan, therefore alerting the checkers to the date on the coupon.

Manufacturers who feel strongly about coupons as a marketing tool could establish coupon redemption pattern studies with regional colleges in an effort to monitor coupon redemption trends. This would be beneficial to not only the manufacturer of coupons but to the retailers of the researched market. Research conducted through grocery store computers, whether it be a focus on coupon redemption or another area of store operation, can be cost-effective to food industry relations.

Consumers

The computer-based scanning system offers the consumer a variety of benefits. For record keeping, the register tape identifies each item purchased alongside the price. Weekly, monthly, or annual food consumption could be recorded on individual food items. For coupon users, the scanning system helps speed up check-out service and the coupon amounts appear on the register tape as subtracted from the total food bill.

In the future, the scannable coupons may further expedite the time required to redeem a coupon of the register. Consumers concerned with shopping time could benefit from this research since it identifies low and peak customer counts. For the consumer who wishes to shop at a slow pace, with little chance of long check-out lines, the hourly customer counts would easily identify the best shopping time. The consumer who planned to make use of the in-store coupon exchange center might review the highest coupon redemption times and shop earlier to ensure a better selection of coupons in the center.

Researchers

Researchers are presented with an opportunity for cooperative projects with businesses. As seen with this study, industry using computer-based registers have information to conduct worthwhile research. Businesses have the data and are usually interested in working with students involved with research. Corporations may not have the budget to allow an employee to conduct computer analysis of data.

Any person conducting research in which the data are obtained from a computer has some beneficial experiences. The opportunity to work with computers and computer data can be a learning experience. Close communication between the

researcher and the company involved is also a factor which would make this type of data base beneficial. Another advantage in obtaining data through a computer source is that information can be retrieved from a computer in a precisely organized format.

Limitations

The research was limited to descriptive data. The data were limited to a one week period which involved only one day of detailed hourly data. This research did not compare coupon users to non-coupon users; rather, it obtained general coupon redemption patterns. The study also applies to a narrow target market which restricts the results to only the Dallas-Fort Worth market. The grocery stores involved in the study were owned by the same food chain; therefore, there were no comparisons of competitive food chains in the area. The population figures were not each store's market population but the city's total population in which the stores were located.. In acquiring data from any in-store computer, consideration for the computer's ability to store information must be a factor. Some computers are structured with short-term recall for information which necessitates obtaining data during the same time period.

Recommendations

This study which made use of data obtained from computer-based scanning systems suggests more research and studies which could facilitate information stored in the computers. Based upon conclusions of this study, the researcher recommends:

1. Initiate an agreement with the retailer to participate in research including the procedure for obtaining data and option of anonymity.
2. Expand the study to examine a longer time period.
3. Broaden the market of the study to include more than one corporate structure.
4. Allow the research to have more detailed analysis. For example, obtain data with coupons redeemed per customer transaction.
5. Focus on specific products purchased with coupons relating product sales to coupon use.
6. Initiate scanner research in areas other than coupons; such as the purchasing habits of food stamp shoppers compared to non-food stamp customers. As scanning registers expand to non-grocery store businesses, research on consumption patterns is unlimited.

REFERENCES

REFERENCES

- Bearden, W. O., Teel, J. E., & Williams, R. H. Correlates of consumers' susceptibility to coupons in new grocery product introductions. Journal of Advertising, 9(3), 1980, 31-35.
- Bloom, P., & Greyser, S. A. The maturing of consumerism. Harvard Business Review, November-December 1981, pp. 130-138.
- Breaking the code. Forbes, March 1978, p. 50.
- Breen, G. E. Marketing research. St. Louis: McGraw-Hill Book Company, 1977.
- Buzzell, R. D., Salmon, W. J., & Cort, S. G. Today the shopping center, tomorrow the superstore. Harvard Business Review, January-February 1974, pp. 89-98.
- Densford, L. E. Beginning of the end of coupons? Progressive Grocer, August 1980, p. 23.
- Elson, J. Coupon trading posts get varied retailers responses. Supermarket News, December 1980, p. 4.
- Elson, J. Scanners for coupons. Supermarket News, May 5, 1980.
- Food Marketing Institute Special Report. The pros and cons of cents-off coupons--The one and one-third billion dollar question. Washington, D.C., March 1981.

- Friedman, M. Consumers use of informational aids in supermarkets. Journal of Consumer Affairs, Summer 1977, 78-89.
- Gallup, G. Journal of Advertising Research, June 1974, 14(3), 7-11.
- Greenwald, J. Scannable coupons are tested. Supermarket News, November 3, 1980, p. 1.
- Greenwald, J. Supermarket News, October 27, 1980, p. 2.
- How coupon promotions can affect sales. Wall Street Journal, September 25, 1980.
- Isaac, S. Handbook in research and evaluation, 1971, pp. 13-15.
- J. C. Penney Company to insert coupons in its catalogs. Wall Street Journal, January 14, 1981.
- Linsen, M. A. High flying coupons soar to the skies. Progressive Grocer, February 1981, p. 65.
- Marton, E. Front end operation and scanners. Supermarket Business, February 1980, pp. 50-51.
- Marton, E. Research firm uses scanners to test impact of ads and coupons. Supermarket Business, March 1980, pp. 18-19.
- Matthews, R. Coupons! Controversial, but still an effective marketing tool for supermarket suppliers. Grocer's Spotlight, May 1980, p. 59.

- McGriff, M. Coupons: Inflation fighters. Banner Herald News, Athens, Ga., April 29, 1979.
- Mosley, L. W. Customer service: The road to greater profits. New York: Lebhar-Friedman Books, 1979.
- Peterson, E. Consumerism as a retailer's asset. Harvard Business Review, May-June 1974, pp. 91-101.
- Rauch, H. High couponing costs blamed on unprepared manufacturers. Supermarket Business, December 1979, p. 1.
- Samtur, S. Cashing in at the checkout. New York: Stone-song Press, 1979.
- Sobczak, Thomas V. The universal product code: An introduction to what it means for consumers. Computers and People, December 1975, pp. 7-9.
- USDA. National food review, September 1978.
- Valentino, C. Social changes yielding 'new' kind of shoppers. Supermarket News, May 4, 1981.
- What consumers think of coupons. Nielson Clearing House, Survey Report, 1981.
- Zbytniewski, J. Working women: Less time more money. Progressive Grocer, June 1979, p. 54.
- Zimmerman, S. Supermarket News, October 27, 1980, p. 2.