

## THE EFFECTS OF SALES PROMOTION ON POST PROMOTION BEHAVIORS AND BRAND PREFERENCES IN FAST FOOD RESTAURANTS

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*Sales promotions work to stimulate and induce choice of customers in restaurants. However, the benefits of the sales promotion may be offset by undermining sales power and preferences of products being displayed when they are no longer promoted. The sales promotions have been long employed in marketing practices for attracting customers and researched academically, but a clear understanding of the impacts of sales promotion on products' sales power and preferences post the promotion, has not been clearly obtained. The current study aims to explore the effects of sales promotion on post promotion behavior such as customer loyalty and purchase behavior in fast food in Egypt. Further the study also investigated the products' preferences in fast food restaurants after terminating the promotion period. A semi structured questionnaire has been developed and distributed over patrons in fast food outlets. The empirical results revealed that sales promotion can be very effective marketing techniques in creating traffic in restaurants and affect on quantity purchase. Despite the sales promotion considered a successful strategy to encourage frequent visits to fast food outlets, it affect negatively on products preferences' especially post the promotion.*

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**Keywords:** *Sales promotion, Product preference, Fast food restaurants.*

JEL Classification: *L83, M1, O1*

### INTRODUCTION

Sales promotions are typically viewed as temporary incentives that encourage the trial of a product or service (Kotler, 1988 ; Blattberg and Neslin, 1993). Sales promotions have one of the strongest impacts on short-term consumption behavior. Kotler and Armstrong (2006) agreed

and added that sales promotions are beneficial to retailers in several aspects: First, promotional variables such as in-store display and “two-for-one” are often used to trigger unplanned purchases. Second, sales promotions encourage consumers to purchase non promoted merchandise (Mulhern and Padgett, 1995). Finally, sales promotions accelerate number of visits to the outlets. In addition, it has been argued that sales promotions encourage consumers to stockpile, leading to a reduction of the retailer’s inventory costs (Shimp and Kavas, 1984; Lichtenstein et al., 1997). Not surprisingly, most researches on their investigation explore the effect of promotions at the time in which they are offered (Blattberg and Neslin 1989; Gönül and Srinivasan 1996). Relatively less attention has been devoted to investigating the consequences of sales promotions for product sales power and preference after the promotion has ended. Furthermore, scholastic opinion on whether promotions help or hinder a brand in subsequent choice periods is mixed. Some researchers assert that sales promotions can undermine brand preference. Aaker (1996) states that promotions have the potential to damage brand equity by focusing the consumer’s attention too heavily on price. Keller (1998) and Jørgensen, et al., (2003) alike warn of a number of disadvantages of sales promotions such as decreased brand loyalty, increased brand switching, decreased quality perceptions and increased price sensitivity. Conversely, other researchers contend that sales promotions can increase brand preference (e.g., Davis et al. 1992). Thus, the extant literature is unclear as to whether sales promotions detract from or enhance brand preference. Despite the widespread use of promotions in marketing practice such as food and beverage settings, retail stores, manufacturing and the equivocal research findings, there has been no systematic attempt to integrate extant research to determine the consequences of promotions on the promoted products once the promotion is rescinded. To address this, a combination of both qualitative and quantitative researches has been conducted to explore the effects of sales promotion on post promotion behavior and preferences post-promotion.

## **LITERATURE REVIEW**

This research builds on important themes in the sales promotions and fast food restaurants literature: the different promotional tools used in fast food restaurants, international fast food chains and local fast food chains. The researcher briefly describes each of these themes below, and describes the methodology framework and provides a detailed

presentation of the obtained results. Eventually the researcher concludes with discussion of the implication emanating from this research.

## **Sales Promotion**

Sales promotion encompasses all promotional activities other than advertising, personal selling and public relations. Laroche et al., (2002), consider sales promotion as “an action-focused marketing event whose purpose is to have an impact on the behavior of the firm’s customers.” Several important aspects of sales promotions should be highlighted to complete this definition. First, sales promotions involve some type of inducement that provides an extra incentive to buy and this represents the key element in a promotional program. Kotler et al., (2003) further added that those incentives are additional to the basic benefits provided by the brand and temporarily changes its perceived price or value. It is also primarily seen as an acceleration tool designed to speed up the selling process and maximize sales volume (Srinivasan et al., 2004). Schneider and Currim (1991) classify sales promotions as active or passive promotions, such as coupons require active search on the part of consumers, whereas in-store promotions such as “two-for-one” involve a limited search, restricted to the store environment. Sales promotions have also been dichotomized into price- and non price-oriented categories (Schneider and Currim, 1991; Lichtenstein et al., 1995). The end benefit of price promotions for the consumer is a lower purchase price (e.g., coupons), whereas other promotions focus on other benefits (e.g., value for money, like “two-for-one” promotions).

## **Different Promotional Tools Used in Fast Food Restaurants**

**Samples** are offers of a trial amount of a product. Some samples are free. For others, the company charges a small amount to off-set its cost (Kotler et al., 2003). For example McDonald’s offered a cup of coffee and an apple-bran for \$1. Normally the coffee the offered for 95 cents but the promotion was designed to get customer to try the muffin. Another common example product sample which used frequently in fast food restaurant is (buy one get one free). **Coupons** are certificates that offer buyers savings when they purchase specific products. As a means of increasing sales, fast food restaurants rely on coupons to draw new customers, stimulate, repeat business from existing patrons and to appeal the price conscious segments of the society (Taylor and Long-Tolbert,

2002). Many studies suggest that coupon incentives positively influence consumers' attitude and behaviors toward consumer goods (Bawa and Srinivasan, 1997). **Premiums** are goods offered either free or at low cost as incentives to buy a product. For example fast food restaurants often offer promotional items such as glasses carrying the name and the logo of the restaurants, T-shirts, caps (Kotler et al., 2006). Another type of premiums is the kids' toys which are always incorporated with a meal prepared for children. The cost of the toys is charged over the cost of the meal (Abdelhamied, 2001). **Price -off** promotion, refers to offering the products lower than its regular price during the promotion period. Since the early 1970s, price promotions have accounted for the main share of the marketing budget in most consumer packaged good categories (Srinivasan, et al., 2004). During the past two decades, a substantial academic literature has established the nature of short-term (immediate) sales response to temporary price reductions, including an assessment of consumer heterogeneity in the effects of a temporary price reduction on sales. A key finding of this literature is that the immediate effect of temporary price reductions, as reflected in short-term (contemporaneous) changes in sales, is consistently found to be high (Neslin, 2002) and to vary substantially across consumer segments. For example, heavy users are found to be more price elastic than light users (e.g., Neslin, et al., 1985), and non-loyal consumers are found to have higher price elasticity than loyal consumers (e.g., Krishnamurthi and Raj, 1991). Such information on how the short-term sales response to temporary price reductions varies across segments of customers is useful in designing and targeting temporary price reductions. Because the profitability of a promotion depends on longer-term as well as short-term effects, another important literature has emerged on examining the longer-term effects of price promotions; in particular, examining enduring effects through persistence modeling that does not assume mean reversion of the dependent variable (Nijss et al., 2001; Srinivasan et al., 2004). Abdelhamied (2001) proved that price-off promotion is very effective tool influencing patrons and attract them to fast food restaurant more than any other type of promotional tools. **Contest and sweepstakes** gives the consumer a chance to win something, such as cash or a trip. Contests call consumers to submit an entry – a jingle, guess, or suggestion to be judged by a panel. A sweepstake calls for consumers to submit their names for a drawing (Blattberg and Neslin, 1993; Kotler et al., 2003). Major international fast food restaurants in Egypt adopted the contests and sweepstake tool in terms of number of purchases or visits to the restaurant. Customers are required to provide an evidence of purchase

form the fast food outlets to submit his/her name for a drawing. This way is quite effective in creating customers traffic in restaurants during slack period of the season and it can attract different segments of patrons.

## **The Fast Food Industry in Egypt**

According to [worldwatch.org](http://worldwatch.org), the Middle East-fast food industry is growing by 52 percent a year and supposed to generate over a billion dollar in sales in 2015 as per their estimates. The entry of the multinational and international fast food chains have helped in flourishing the industry in the Middle East especially in Egypt and the United Arab of Emirates. In Cairo, Egypt Wimpy was the first international fast food restaurant to be opened in 1973, and since that time many international chains have expanded in Egypt by opening many restaurants such as McDonald's, Burger king, Pizza Hut, Hardee's and KFC. American and European companies have played the central role in the development of fast food restaurants in Egypt. American food franchises are dominant and are estimated to have about 63% of the domestic market in Egypt. Local chains have about one-third of the market and the rest belongs to a European chain, namely Burger King. Traditional Egyptian restaurants serve traditional food, such as Falafel, Beans, Koshary, Chicken, Beef and Kebabs (World watch, 2002). Table 1 shows both the international and the local fast food chains operating in Egypt.

The fast food industry in Egypt is a highly competitive industry; the battle for the market share in the fast food industry is intensified. Today the fast food market is more fully developed, leaving less room for expansion. Instead of competing against the other types of operations, they now compete against each other. Basically, each offers the same products – a cheap snack, cleanliness and fast efficient service. Thus, it becomes difficult for any restaurant to achieve a decisive advantage over another; therefore they adopt the promotional tools to acquire more market segment (Bryant and Dundes, 2008).

Many definitions have emerged for fast foods in the literature. A few of these are mentioned below:

*Definition 1.* Fast food have been defined by Bender (1995) and Hiemstra and Kim (1995) as a “general term used for a limited menu of foods that lend themselves to production-line techniques; suppliers tend to specialize in products such as hamburgers, pizzas, chicken, or sandwiches”

**Table 1** International and local fast food chains operating in Egypt

International chains	Local chains
McDonald's	Mo'Men
Burger King	Bon Appetite
Hardee's	Quick
K.F.C	Grand Café
Pizza Hut	Radwan
Little Caesar's	Pizza King
Domino's Pizza	Pizza Plus
Subway	
A & W restaurants	
T.G.I Friday's	
Taco Bell	

*Source: Tourism chamber, 2010*

*Definition 2.* Fast food market is defined as the sale of food and drinks for immediate consumption either on the premises or in designated eating areas shared with other foodservice operators, or for consumption elsewhere (Park, 2004 ; Law et al., 2004). Although the price of fast food is not cheap, when compared with the traditional local fast food, many young Egyptians consider fast food restaurants as social and proper places of meeting and eating out. The growing number of fast food chains and restaurants in newly established shopping centers and hypermarket complexes are evidence of this newly emerging demand. Nowadays international fast food restaurants existed in major cities of Egypt.

Several factors can explain the changes in consumers' fast food consumption in Egypt: the increasing participation of women in the labor force, longer workdays, growing number of households living on at least two-income sources, decreasing household sizes, urbanization, growth in tourism, increasing of foreigners living in Egypt, longer life expectation, increasing education level of consumers, increasing per capita income, and increasing number of fast food restaurants, such as McDonald's, Burger King, KFC, Pizza Hut and the others. In addition, the younger generation, who are influenced by western lifestyles portrayed through television and advertisements, exhibit a preference for fast food restaurants. Not only Egyptian adolescents are becoming increasingly

more westernized and have greater convenience when they eat out, But also older generation prefer fast food restaurants (Abdelhamied, 2001).

Despite its growing importance, fast food restaurants have received little detailed attention in the academic literature, being considered in promotion and its effects on food consumption in fast food restaurants, but few studies have discussed different topics related to the fast food. Jekanowski et al., 2001; Nayga and Capps, 1994; Park, 2004; Stewart, et al., 2004). According to these literatures, customer profiles for those who consume food away from home are more educated, younger, and have higher-paying jobs and household incomes. While this view is generally sufficient for food away from home as a whole, it is somewhat limited in the specific case of fast food. Byrne et al. (1998) identified household income, household size and composition as important determinants of total household expenditures on restaurants, fast food facilities, and other food away from home facilities. Ekelund and Watson (1991) also found that fast food consumption was empirically related to opportunity costs of the household. Nayga and Capps (1994) analyzed the impact of socio-economic and demographic factors on individual intake of saturated fat and cholesterol from fast food and food at home markets. Jekanowski et al., (2001) examined the effect of price, income and demographic characteristics on fast food consumption. Fanning et al., (2002) investigated the different socio-economic determinants of the likelihood of consuming fast food using the logit model. Although all these studies overlooked the impact of socio-economic characteristics of households on fast food expenditures, little is known about the characteristics of consumers who prefer to consume food at fast food restaurants, their attitudes towards price, health, and the effects of child preference on fast food consumption.

Park, (2004) investigated the relationship between consumer values of eating-out and the importance of fast food restaurant attributes in Korea and showed that consumers choose fast food restaurants more for hedonic reason, not utilitarian, values of eating out. When consumer considered the convenience and price of an eating-place, the utilitarian value of eating out plays an important role in restaurant evaluation and selection (Johns and Pine, 2002; Park, 2004).

The researcher selected the international fast food restaurants in order to conduct the research, because they are one of the fastest growing segments in the foodservice industry in Egypt, and they develop and offer diverse promotions constantly to attract customers. Local fast food

restaurants also offer promotions but they are not sufficient and/or constantly.

## **STUDY HYPOTHESES**

The current research aims firstly: to shed the light on the effects of sales promotion on products' sales power in international fast food restaurants in Egypt. The following hypotheses are suggested:

**H1.** The frequency of restaurants' visitations will be increased during promotion periods more than non promotion periods.

**H2.** The sales promotion has a positive effect on quantity purchase intention.

The second objective of the study is to explore the impact of sales promotion techniques on customer loyalty in fast food restaurants. The suggested hypotheses states as follows:

**H3.** Different sales promotion techniques offered by fast food restaurants (premiums, coupons, sampling, discounts and contests and sweepstakes') will have a significant and a positive influence on customer loyalty.

The third objective of this study is to examine the effects of sales promotion on brand preferences and sales power after terminating the promotion periods, therefore the following hypothesis were proposed

**H4.** The influences of sales promotion on products' preferences post the promotion period will be significantly different.

## **METHODOLOGY**

### **Sampling and data collection**

A purposeful sampling technique was utilized to conduct the current study. Self administrated questionnaire were distributed to 530 diners at 28 international fast food restaurants in Cairo, the capital of Egypt, and Alexandria which is the second major governorate in Egypt. The participating international fast food chains include (McDonald's, Burger King, Hardee's, KFC, Pizza Hut, Demon's Pizza, TGI Fridays and Subway.

## **Ethical considerations and negotiation of access.**

Before questionnaire administration the ethical approval was gained from the sampled international fast food chains after visiting the operational directors in those chains. The purpose of the research and the reasons for selecting the sampled chains has been explained by the researcher to the directors to get their approval. The researcher agreed with the restaurants' directors to distribute the questionnaire during the promotion period and post the promotion immediately in order to fulfill the research aim. The directors allowed the researcher to conduct his research in the specified and convenient time for both the staff and the researcher.

518 forms were distributed over the sampled restaurants and only 376 valid questionnaires were obtained at a response rate of 72.58%. Before questionnaire distribution, the questionnaire was tested by a jury of industry experts and hospitality scholars to assess its validity and the clearance of the used scales and questions.

## **Questionnaire design and administration**

The questionnaire was encompasses five sections. The first one explores the demographic variables of respondents and their frequency in general to fast food outlets. The second section had two parts, the first; asked respondents to state whether they visit the restaurant during the promotion period or post the promotion. The second part reveals respondents' viewpoints regarding some attributes of the fast food restaurants using a five-point likert scale (1: extremely not agree and 5: extremely agree). The third section investigates the level of customer loyalty to fast food restaurants. Customer loyalty scale for this study was devised and modified from Dick and Basu (1994) and Mols (1998). The modified items concerned with attitudinal loyalty were as follows: I consider fast food as my first choice when deciding to eat out; I prefer to visit fast food outlets even if another type of restaurants runs promotions and I believe I'm loyal to fast food restaurants. Another two items related to behavioral loyalty: I will keep visiting fast food restaurants and I would recommend fast food restaurants to others. All the five items in scale were measured by the same five point-Likert scale used in the second section.

Purchase quantity patterns were described in the fourth part. Customer quantity purchase behaviors included two items the

respondents' frequencies to the fast food restaurants during the promotion and after the promotions periods which was prescribed previously in part one and expenditure per customer.

The remaining section contained two parts the first reveals respondents' perceptions regarding products preferences and image during and post promotion periods. The second concerned with the behavioral intention towards the promoted products hence customers were asked about their intention to buy the same products being promoted post the promotion at their regular prices before the promotion. Two items were stated as follows: I would pay the same regular price for the products being promoted post the promotion and I will certainly recommend the promoted products to friends and relatives. All the items in this part were measured by using the same five-point likert scale used in part four (1: extremely not agree and 5: extremely agree).

### **Questionnaire administration**

The questionnaire forms were handed to staff working in the fast food restaurants to give them to guests visiting the sampled restaurants during the promotional period. Whenever the promotion period terminates, the staff were asked to distribute the questionnaire form just for five days after terminating the promotion period. This process lasted for more than three months in different outlets in both Cairo and Alexandria. Normally the promotion period lasts for a week and in sometimes for 10 days in one restaurant. Customers were asked to give the forms back to the staff after filling them.

### **DATA ANALYSIS**

The questionnaires were optically scanned and data were entered into the SPSS version 20.0 Frequencies, simple percentage, means, independent t-test, factor analyses and multiple regression analyses were utilized to analyze the data. ANOVA and cross tabulation were also used. Independent t-test and ANOVA were utilized to detect significant differences in post promotion behaviors. Factors analysis was conducted in order to examine the construct validity of the loyalty scale. A multiple regression analysis was conducted to examine the explanatory power of the independent variables (benefits of sales promotion for customers) and dependent variable (customer loyalty). Eventually, data were spilt into two groups, the first customers patronize the fast food restaurants during promotion period and customers come post the promotion. Using each

sample, two additional multiple regression analyses were conducted to examine differential effects of sales promotion on products preferences in fast food restaurants.

## **RESULTS AND DISCUSSION**

The sample was evenly divided along gender lines with 37.2% of respondents being female and 62.8% being male. 58% of respondents were from the age category ranging from 21-35 years and 25% were from the age category ranging from 36-50 years, while 17% were less than 20 years. This result agrees with the finding of Abdelhamied (2001), hence the youth represents the biggest segments of fast food patrons in Egypt. The sample was skewed toward singles 7.7%. While married with children and married without children represent the remaining percentage respectively. Most respondents approximately 74 % had a family income more than 1200 LEs per month.

Results also indicated that A great proportion of the respondents (67.9%) increase their visits to fast food outlets during promotional days three times a week or more. Surprisingly, given the relatively low income, 59.6% of the sample was composed of heavy (i.e., once a week or more) or moderate (i.e., two to four times a month) consumers of fast food during promotional periods. This finding support the first hypothesis which concluded that the frequency of fast food restaurants' visitations will be increased during promotion periods more than non promotion periods.

A cross tab correlation was used to determine the relationship between marital status and frequency to fast food restaurants during promotion days. Married with children were found to be the more to visit fast food outlets during promotion days than married with out children and singles. The correlation coefficient was (- 0.64) and it was significant at the 0.05 level. This implies the importance of the promotion for family groups hence sales promotion encourage family members to eat in those outlets which will result in purchasing big quantities.

**Table 2** Marital status \* Frequency to fast food outlets during promotion\* Cross tabulation

Marital Status.	frequency to fast food outlets During promotion					Total
	Once a week	Three times a week or more	Once a month	Twice a month	Rarely	
Singles	3	12	1	3	0	19
Married with out children	19	36	9	6	2	72
Married with children	49	71	14	8	1	143

In order to examine the consumers' perceptions regarding fast food attributes during and post promotion, ANOVA was conducted on some of these attributes as illustrated in table 3.

**Table 3** Fast food attributes

Attributes	During promotion		Post promotion	
	Mean Scores	S.D.	Mean Scores	S.D.
Menu variety	3.93	0.84	4.16	0.72
Quality of food	3.90	0.88	4.23	0.68
Convenience	4.00	0.70	4.09	0.96
Quality of service	1.46	1.28	2.83	1.01
Suitableness for children	4.13	0.71	4.17	0.91
Store facilities	4.11	0.72	3.91	0.93

Results indicate that most of these attributes were satisfactory during and after promotion to a great extent, except quality of service. The findings indicate a significant difference in regards to the quality of service especially during promotion ( $F 2.432 = 29.1 P < 0.02$ ). It could be inferred from the obtained findings that the high traffic in restaurants during promotion leads to slow service and this finding also support H2.

*Post-consumption behaviors between patrons during promotion days and patrons during non-promotion days*

In order to validate the scale used to measure the customer loyalty in fast food restaurants, the number of factors was extracted by principal component analysis. Factors were rotated using the *Varimax* method. The analysis resulted based on one-factor (eigenvalue greater than 1.0), which accounted for 70.3% of total variability of customer loyalty. All five loyalty variables satisfied the factor loading criteria (0.42 or greater). The results also indicated that the variables were loaded very high on the customer loyalty construct with the loading value ranging from .732 to .898 (see Table 4). The reliability coefficient was calculated to access the internal consistency of the items. The alpha value for the loyalty instrument was 0.784. All the above results supported that the modified scale has solid construct validity and the five variables are reliable measures of the underlying attribute of customer loyalty in the fast food restaurants.

**Table 4** Dimension of customer loyalty Variables

Customer loyalty	Facto loadings
I consider fast food as my first choice when deciding to eat out	.757
I prefer to visit fast food outlets even if another type of restaurants runs promotions	.732
I believe I'm loyal to fast food restaurants	.898
I will keep visiting fast food restaurants	.782
I would recommend fast food restaurants to others	3.846
Eigenvalue	70.3 %
Variance explained	0.784
Cronbach's $\alpha$	

Two independent t-tests were conducted to detect any significant differences in post consumption behaviors between patrons visiting fast food restaurants during promotion days and patrons visiting the restaurants post-promotion days. The first independent t-tests were used to detect any significant difference in both attitudinal and behavioral customer loyalty between the two groups of beneficiary of the promotion and non- beneficiary of the promotion. The results of the independent t-tests are displayed in Table 5. The mean scores of promotion beneficiaries are significantly higher than non-promotion beneficiaries in all five variables, which imply that the promotion beneficiaries are much more loyal to the fast food restaurants than the non beneficiaries of promotion.

Consequently, Hypothesis 3 concerning a significant difference in customer loyalty between patrons during promotion days and patrons during non-promotion days is supported.

**Table 5** Customer loyalty between promotion beneficiaries and non- beneficiaries of promotion

Customer loyalty / Behavioral loyalty	Mean (Standard deviation )		
	Promotion beneficiaries (n =234 )	Non promotion beneficiaries (n = 142)	t-value (p-value )
I consider fast food as my first choice when deciding to eat out	4.009 (0.689)	2.146 (0.671)	12.097 (0.000)
I prefer to visit fast food outlets even if another type of restaurants runs promotions	3.968 (0.724)	2.504 (0.691)	10.988 (0.000)
I believe I'm loyal to fast food restaurants.	3.963 (0.849)	2.689 (0.642)	11.952 (0.000)
I will keep visiting fast food restaurants.	3.711 (0.654)	1.989 (0.571)	7.963 (0.000)
I would recommend fast food restaurants to others	3.083 (0.812)	2.103 (0.741)	8.812 (0.000)

Next, differences in patrons purchase behavior (number of visits during promotion and post promotion, expenditure per person during and post promotion as well). The results of independent t-tests are shown in Table 6. Between the two groups, there was a significant difference in the number of visits the customers made during promotion. The mean scores of frequency of visits for the customers who patronize the restaurants during promotion was higher than those who patronize the restaurants post promotion Therefore, Hypothesis 1 regarding a positive relationship between sales promotion and frequency of visits to fast food restaurants, is supported.

**Table 6** Quantity purchase behavior between patrons during promotion and patrons post promotion

Mean / (Standard deviation )			
Customer loyalty / Behavioral loyalty	During promotions (n =234 )	Post promotions (n = 142)	t-value (p-value )
Number of visits	4.009 (0.689)	2.146 (0.671)	3.084 (0.002)
Expenditure per patron	LEs 350	LEs 100	0.342 (0.003)

Additionally, quantity purchase has been affected by the sales promotion and increased during the promotion period than post promotion and this was very obvious in patrons' expenditure during promotion, which support Hypothesis 2 as well. To sum up, sales promotion appear to be an effective marketing tool to stimulate the frequency of visits, and to increase the intention of customers to purchase more quantities. The obtained results accords with (Manning and Sprott, 2007) who found multiple unit prices affect positively on quantities purchased in retail stores. Also Gijsbrechts et al. (2003) proved that store flyers that reduce prices improve store performance and create traffic in stores.

*Impact of sales promotion tools on products preferences in fast food restaurants*

In order to investigate the differential effects of the different sales promotion tools on products preferences, two multiple regression analyses were carried. Data were spilt into two groups; the first group customers visiting the fast food restaurants post promotion and the second group; customers patronizing during the promotion periods.

The SPSS output for the multiple regression analysis is shown in table 7 (model summary) where the *R-square* for the model is .608. This means that 60.8 percent of the variation in products' preferences (dependent variable) can be explained from the five independent variables. The results also indicate that the overall model is significantly different from zero (*F*-ratio = 109.987; probability level "Sig." *P* = .000.), this probability level means that the regression model is solid with reasonable explanatory power. To determine if one or more of the independents variables is a significant predictor of the dependent variable (products preferences), the provided information in table 7 (the coefficients) has been checked. The results of (*t* statistics) column revealed that three out of five variables are significant variables at the 0.05 level.

**Table 7** Impacts of sales promotion on products' preferences post promotion period Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
(Constant)	-.055	.287		-.148	.069		
Price-off	.522	.029	.722	13.405	.000	.910	1.188
Coupons	.389	.044	.431	12.094	.001	.842	1.099
Sampling	.239	.071	.678	9.747	.000	.822	1.185
Premiums	.149	.091	.138	2.767	.083	.763	1.236
Contest and Sweepstakes	-.003	.128	-.027	-.023	.998	.772	1.298

**R Square: .608, Adjusted R Square: .539, F-ratio = 109.987, P-value = .000, Std. Error of the Estimate= .635**

a. Dependent Variable: Products preferences

The standardized coefficient Beta column in table 7 reveals that price-off has a beta coefficient of .722 which is significant (.000). Similarly coupons and sampling are significant and have a beta coefficient of .431 and .678 respectively and they are significant (.000). On the other hand variables like premiums and contests and sweepstakes were found not significant, the two variables have a coefficient beta (.138, -.027) respectively and their P value were (.083) and (.998).

Price-off was the most essential factor affecting on products' preferences in fast food restaurants, because its highest coefficient value ( $b=.722$ ) and this result indicates that the price-off has a negative influence on the product image and preferences post the promotion. Sampling ( $b=.678$ ) and coupons ( $b=.431$ ) followed price off in descending order. These findings indicate that the sales promotion tools have a great impact on products' preferences post promotion at fast food restaurants and therefore hypothesis 4 is supported.

A common problem associated with the regression analysis is when the independent variables are highly correlated among themselves, referred to as multicollinearity. High level of multicollinearity makes it difficult for the regression equation to identify the separate contributions of each independent (predictor) variable, thus the presence of multicollinearity was assessed by using the tolerance value (see table 7). Tolerance and VIS (variance inflation factor) show the degree to which each independent variable is explained by the other independent variable and used to assess whether multicollinearity is causing problem in regression. For tolerance values smaller than .75 generally indicate multicollinearity is likely a problem, in contrast if the tolerance values is larger than .75, indicate multicollinearity is likely not a problem (Hair et al., 2006). All the variables in the current research had a high tolerance value showing no significant multicollinearity among the investigated variables.

The second regression was carried out during promotion period, the obtained results revealed that the  $R^2$  for this regression model is .102 and it is not significant at the .000 level. Additionally, the coefficients indicated that all the sales promotion variables were not significant at the .000 level, and therefore not interpreted. These findings indicate that the null hypothesis can be rejected where the independent variables are not related to the dependent variable (product preferences) during promotion period.

**Table 8** products preferences post the promotion and during the promotion

Variables (Products' preferences)	Mean / (Standard deviation )		<i>t</i> -value ( <i>p</i> -value )
	During promotions (n =234 )	Post promotions (n = 142)	
I would pay the same regular price for the products being promoted post the promotion	4.102 (0.589)	1.493 (0.671)	2.714 (0.002)
I will certainly recommend fast food products to friends and relatives	3.861 (0.759)	2.36 (1.037)	0.342 (0.003)

In order to ensure the results of the conducted two multiple regression analyses, independent t-tests were performed to test the mean differences in products' preferences post promotion and during promotion periods. Table 8 indicates that there is a statistical significance between the two groups at the level .05, which supports and powers the conducted regressions.

## **MANAGERIAL IMPLICATION**

The current research examines firstly; the impacts of the different sales promotion tools used in fast food restaurants on post-promotion behaviors such as customer loyalty quantity purchase and frequencies to the fast food restaurants. Secondly; it also investigates the effects of sales promotion on brand preferences in fast food restaurants.

The main themes emerged from the study showed some essential implications; hence the sales promotion tools were found to be very effective marketing tool that can be used by the fast food managers to increase patrons' frequencies to the restaurants during slack periods. Sales promotion also boosts the quantity purchase intention.

The empirical results illustrated that, all the beneficiaries of the sales promotion were found to be very loyal to the fast food restaurants than non beneficiaries of the promotion.

The findings also indicated that the type of sales promotion determine the effect on brand preferences. The different sales promotion has no impacts on products preferences during promotion time, and this is a very logical finding. On the other hand, some of the tested sales promotion has negative impact on products preferences post the promotion. Price-off, coupons and sampling respectively have negative impacts on products preferences post the promotion; but post promotion brand preference was relatively more favourable when using premiums or contests and sweepstakes'. This implies that both of premiums and contests and sweepstakes' can be used for long time promotion with out any effects on the products being promoted them.

Finally, this study indicated that the use of sales promotion in fast food restaurants may create traffic in stores and increase customers' frequency, nonetheless they are not necessarily generate high profits for the restaurants and they also diminish the product preferences post the promotion. Managers may resort to reduce the food cost percentage of promoted items during the promotion which will lead to reducing the regular quality of those items and resulting in a negative customer

perception of the promoted products and rejection of these items post the promotion.

## REFERENCES

Abdelhamied, H. (2001). Evaluating the sales promotional tools used in quick service restaurants. *Unpublished Master Thesis*, Helwan University, Egypt.

Aaker, D.A. (1996). Measuring brand equity across products and markets. *California management review*, Vol. 38, No.3, pp.102-120.

Blattberg, R. & Nelsin, S. (1989). Sales Promotion: The long and short of it. *Marketing Letters*, Vol. 1, No. 4, pp.81-97.

Blattberg, R. & Nelsin, S. (1993). *Sales Promotion Models*, In J. Eliashberg and G.L. Lilien (Eds.) *Handbooks in OR and MS*, North-Holland, Vol. 5, pp.553-560.

Bawa, K. & Srinivasan, S. (1997). Coupon attractiveness and coupon proneness: A frame work for modeling coupon redemption. *Journal of Marketing Research*, Vol. 34, No.4, pp.517-526.

Bender, D. (1995). *A Dictionary of Food and Nutrition*. Oxford, Oxford University Press.

Byrne, P., Capps, O. & Saha, A. (1998) Analysis of quick-serve, mid-scale, and up-scale food away from home expenditures. *The International Food and Agribusiness Management Review*, Vol. 1, No.1, pp.51- 72.

Bryant, R. & Dundes, L. (2008). Fast food perceptions: A pilot study of college students in Spain and the United States. *Appetite*, Vol. 51, No.2, pp.327-330.

Davis, J., Jeffrey I. & McAlister, L. (1992). Promotion has a Negative Effect on Brand Evaluations—or Does It? Additional Disconfirming Evidence. *Journal of Marketing Research*, Vol. 29, pp.143–148.

Dick, A. & Basu, K. (1994). Customer loyalty: Toward an integrated framework. *Journal of the Academy of Marketing Science*, Vol. 22, No.2, pp.99-113.

Ekelund, R. & Watson, J. (1991). Restaurant Cuisine, Fast Food and Ethnic Edibles: An Empirical Note on Household Meal Production. *KYKLOS*, Vol. 44, No.4, pp.613-627.

Fanning, J., Marsh, T. & Stiegert, K. (2002). Determinants of fast food consumption. *WAEA* . Selected paper. CA. Long Beach.

Gijsbrechts, E., Campo, K. & Goossens, T. (2003). The Impact of Store Flyers on Store Traffic and Store Sales: A Geo-Marketing Approach, *Journal of Retailing*, Vol. 79, pp.1-16.

Gönül, F. & Kannan, S. (1996). Impact of consumer expectations of coupons on purchase behavior, *Marketing Science*, Vol. 15, No.3, pp. 262-279.

Hair, J., Black, B., Babin, R., Anderson, B. & Tatham, R. (2006). *Multivariate Data analysis*, Upper Saddle River, NJ, Prentice-Hall.

Hiemstra, S. & Kim, W. (1995). Factors affecting expenditures for food-away-from-home in commercial establishments by types of eating places and meal occasion. *Hospitality Research Journal*, Vol. 19, No.3, pp.15-31.

Jekanowski, M., Binkley, J. & Eales, J. (2001). Convenience, accessibility, and the demand for fast food. *Journal of Agricultural and Resource Economics*, Vol. 26, No.1, pp.58-74.

Johns, N. & Pine, R. (2002). Consumer behavior in the food industry: A review. *International Journal of Hospitality Management*, Vol. 21, No.2, pp.119-134.

Jørgensen, S., Taboubi, S. & Zaccour, G. (2003). Retail Promotions with Negative Brand Image Effects: Is Cooperation Possible? *European Journal of Operational Research*, Vol. 150, No.2, pp.395-405.

Kotler, P. & Gary, A. (2006). *Principles of Marketing*. New Delhi: Prentice-Hall of India.

Kotler, P., Stewart, A., Linden, B. & Gary, A. (2003) *Principles of Marketing*, 2<sup>nd</sup> ed. Sydney, Pearson Education Australia.

Kotler, P. (1988). *Marketing management - analysis, planning, implementation and control*. New Jersey, Prentice-Hall.

Keller, L. (1998). *Strategic brand management*. Upper Saddle River, NJ: Prentice Hall.

Krishnamurthi, L. & Raj, S. (1991). An Empirical Analysis of the Relationship between Brand Loyalty and Consumer Price Elasticity. *Marketing Science*, Vol.10, No.2, pp.172-183.

Law, Y., Hui, V. & Zhao, X. (2004). Modeling repurchase frequency and customer satisfaction for fast food outlets. *International Journal of Quality and Reliability Management*, Vol. 21, No.5, pp.545-563.

Lichtenstein, D., Netemeyer, R., Burton, S. (1997), An examination of deal proneness across sales promotion types: a consumer segmentation perspective. *Journal of Retailing*, Vol. 73, No.2, pp.283-297.

Lichtenstein, D., Netemeyer, R. & Burton, S. (1995). Assessing the domain-specificity of deal-proneness: a field study. *Journal of Consumer Research*, Vol. 22, No.3, pp.314-26.

Laroche, M. (2002). Selected issues in modeling consumer brand choice: the extended competitive vulnerability model. In A.G. Woodside and E. Moore (Eds.) *Essays by Distinguished Marketing Scholars of the Society for Marketing Advances* (pp. 69-114), Kidlington: Elsevier Science.

Manning, K. & Sprott, D. (2007). Multiple unit price promotions and their effects on quantity purchase intentions. *Journal of Retailing*, Vol. 83, No.4, pp.411-421.

Mulhern, J. & Padgett, T. (1995). The relationship between retail price promotions and regular price purchases. *Journal of Marketing*, Vol. 59, No.4, pp.83-90.

Mols, N. (1998). The behavioural consequences of PC banking", *International Journal of Bank Marketing*, Vol. 16, No.5, pp.195-201.

Nayga, M. & Capps, O. (1994). Impact of Socio-Economic and Demographic Factors on Food Away from Home Consumption: Number of Meals and by Type of Facility. *Journal of Restaurant and Foodservice Marketing*, Vol. 1, No.1, pp.45-69.

Nijs, V., Marnik, D., Steenkamp, E. & Hanssens, D. (2001). The category demand effects of price promotions. *Marketing Science*. Vol. 21, No.1, pp.1-22.

Neslin, S. (2002). Sales Promotion. In R. Wensley and B.A. Weitz (Eds.) *Handbook of Marketing* (pp. 310-338), London, New Delhi: Thousand Oaks.

Park, C. (2004). Efficient or enjoyable? Consumer values of eating-out and fast restaurant consumption in Korea. *International Journal of Hospitality Management*, Vol. 23, No.1, pp.87-94.

Stewart, H., Blisard, N., Bhuyan, S. & Nayga, R. (2004). The demand for food away from home: Full-service or fast food? *Agricultural Economic Report*, No. 829.

Schneider, L. & Currim, I. (1991) Consumer purchase behaviors associated with active and passive deal-proneness, *International Journal of Research in Marketing*, Vol. 8, No.3, pp.205-222.

Srinivasan, S, Pauwels, K., Hanssens, D. & Dekimpe, M. (2004), Do Promotions Benefit Manufacturers, Retailers or Both?. *Management Science*, Vol. 50, No.5, pp.617-629.

Shimp, T. & Kavas, A. (1984), The theory of reasoned action applied to coupon usage. *Journal of Consumer Research*, Vol. 11, No.3, pp.795-809.

Taylor, G. & Long-Tolbert, S. (2002). Coupon promotions in quick-service restaurants: preaching to the converted. *Cornell Hospitality Quarterly*, Vol. 43, No.4, pp.41-47.

*SUBMITTED: MAR 2012*

*REVISION SUBMITTED: SEP 2012*

*ACCEPTED: OCT 2012*

*REFEREED ANONYMOUSLY*

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