# Effects of the Coupon Expiration Date and Stamp on Consumers' Value Perception of Coupons

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#### **Abstract**

This study examines the effects of the coupon expiration date and stamp on consumers' perceived value of coupons. The causal relationships were analyzed using data collected from consumers, and the impacts of the coupon expiration date and stamp on the value perception of coupons were compared between college students and office workers.

Keywords: Coupon, Expiration date, Stamp, Value perception

#### 1. Introduction

Coupons have been used by many consumers for more than a century. According to Nielsen Clearing House (1993), more than 75% of households use coupons in some product category (Leone and Srinivasan, 1996). With over 270 million coupons being distributed annually, coupons continue to be an important promotional vehicle for frequently purchased consumer products (Colombo et al., 2003). For example, the U.S. coupon market is valued at approximately 9 trillion won, and coupon use is widespread, with over 2.58 billion coupons issued in 2004 alone (World Daily, 2006). Prior coupon research has indicated that coupons are effective in increasing short-term revenues across a wide range of countries (Lee and Yeu, 2010).

The purpose of this study is to investigate the main factors, the coupon expiration date and stamp, influencing consumers' value perception of coffee shop coupons. Because of the heavy use of coupons in coffee shops, there is a need for examining consumer behavior toward coffee shop coupons. This study first provides a brief literature review, focusing on coupons and their perceived value, and then presents the results of the empirical analysis (including a path analysis exploring the hypothesized causal model) of the data collected from coffee shop consumers. Finally, the study presents a comparison of the impacts of the coupon expiration date and stamp on the value perception of coupons between college students and office workers. The empirical findings of the study have practical implications and provide a better understanding of consumers' perception of coupon value.

## 2. Theoretical Background and Hypothesis

A coupon is a certificate that, when presented for redemption at a retail store, entitles the bearer to a specified saving on the purchase of a particular product or brand (Stanley, 1982). Lee and Kim (2008) pointed out that coupons contain a set of provisions that retailers are bound to execute when consumers purchase the stipulated products or brands. In addition, they insisted that coupons should be understood as a way to stimulate sales by increasing purchase incentives. Thus, coupons serve as a stimulus for sales by offering discounted prices and additional or free benefits; they also increase consumer purchase motivation within a short period of time (Kwak and Kim, 2006; Lee and Kim, 2008).

The coupon expiration date is the time until which coupons are valid and consumers can enjoy the promised benefits (Kim et al., 2006). Inman and McAlister (1994) defined the role of the coupon expiration date as "couponers to limit their financial liability temporally."

The effect of the coupon expiration date on coupon value was discussed in Bowman, Inman and McAlister (1994); they claimed that consumers make efforts to remember the expiration date of coupons and that as the expiration date approaches, consumers attempt to redeem coupons to avoid economic loss. Ye et al. (1999) investigated the influence of the expiration date on the perceived value of coupons; however, they failed to verify a significant relationship. However, Lee and Yeu (2010) found that the expiration date had a significant relationship with the perceived value of coupons.

The perceived value of a coupon is the value assigned to the coupon by the consumer who plans to make a purchase with the coupon (Ye et al., 1999). Past research on this topic has focused on the economic benefits

perceived by consumers (Dodson et al., 1978; Winer, 1986; Bawa and Shoemaker, 1987). Raghubir (1998) claimed that a coupon's value is a signal for price. Others have argued that coupons should be understood as an economic benefit that the consumer recognizes (Kim and Kwon, 2005; Park and Kim, 2009). Many studies have observed the psychological aspects of consumer coupon use, including enjoyment and pride. Mittal (1994) and Schindler (1989) noted that the feeling of competence and intelligence that accompanies coupon use contributes to consumers' belief of themselves as smart shoppers, which in turn plays an important role in their coupon use (Lee and Yeu, 2010).

With respect to the coupon value in coupon promotions, a positive relationship exists between coupon use and monetary value (Ward and Davis, 1978). When consumers recognize the benefits of coupons, their value perception of coupons increases, and as such, there is likely to be a positive relation between the coupon expiration date and consumer's perception of coupon value. Therefore, Hypothesis 1 is proposed as follows:

H1: The coupon expiration date positively affects consumer's value perception of coupon.

Zeithaml (1988) defined the perceived value as "the consumer's overall assessment of utility of product based on perception of what is received and what is given." A consumer using a coupon assesses its utility by the number of stamps on the coupon. That is, when a consumer receives a coupon stamp at a coffee shop, the consumer evaluates the number of stamps needed for getting a free cup of coffee. In other words, a consumer's behavior toward coupon stamp can be understood as the consumer's belief that he or she had already perceived the value of the coupon. Thus, Hypothesis 2 is proposed as follows:

H2: The coupon stamp positively affects consumer's value perception of coupon.

## 3. Empirical Analysis

#### 3.1 Measures

The items used to measure the factors to confirm content validity were adapted from previous studies. The expiration date was measured as the consumer's evaluation of the real period or date. Two items were used to measure the expiration date: "Evaluation of the expiration date of a coupon." These items measured the perceived evaluation of the coupon expiration date, which was based on a series of adjectives. The first item was anchored by "inadequate" and "adequate." The second item was anchored by "unsuitable" and "suitable." The former was developed for this research, and the latter was adapted from Lee and Yeu (2010) and assessed by using a seven-point scale.

The coupon stamp was measured as the consumer's evaluation of the total number of stamps required for getting a free cup of coffee. A single item was used to measure the number of stamps: "Evaluation of the number of stamps." The item measured the perceived evaluation of the total number of stamps, which was based on a series of adjectives. The item was anchored by "inadequate" and "adequate." The item was developed for this research and assessed by using a seven-point scale.

Consumer's perception of coupon value was measured by two items: "Coupon usage saves money" and "Coupon usage helps the household budget." These items were adapted from Mittal (1994) and Lee and Yeu (2010) and measured on a seven-point scale ranging from "strongly disagree" to "strongly agree." Thus, all the measures employed in the present study have been widely used in past research or developed specifically for this study.

## 3.2 Data collection

The data were collected by trained interviewers from October 15 to November 10, 2009. A questionnaire survey was administered to coffee shop consumers in Seoul. Several coffee shops were randomly selected to efficiently obtain the survey data. A total of 475 usable responses were collected out of the 500 distributed. This study employed structural equation modeling to test the hypothesized relationships and used LISREL 8.30 software. In addition, SPSS 12.0 software was used for the frequency analysis and the reliability test.

Table 1 presents the descriptive statistics of the respondents' demographic characteristics. Of the 475 respondents, 53.5% were male, and 46.7% were female; 16.2% were between the ages of 10 and 19, 75.4% were between the ages of 20 and 29, 5.9% were between the ages of 30 and 39, and 2.5% were 40 and over. The monthly income of a majority of respondents (82.1%) was under 1.5 million won. Approximately 86.8% had an associate's or bachelor's degree.

### < Insert Table 1 Here>

## 3.3 Reliability and validity assessment

To assess the reliability and validity of the measures of each construct, this study employed internal consistency

and covariance structure analysis. The value of Cronbach's alpha coefficients for the expiration date was 0.943, and that for the consumer's perception of coupon value was 0.764; these values were greater than the acceptable level of 0.7 for all of the items (Nunnally, 1978). However, the coupon stamp was measured on a unidimensional scale consisting of a single question; hence, no reliability coefficient could be computed.

The goodness of fit of the structural equation model was evaluated by using a variety of indices. The results of the covariance structure analysis are presented in Figure 1.

## < Insert Figure 1 Here>

The chi-square test was used to assess the overall goodness of fit. The chi-square test assessed the adequacy of the hypothesized model in terms of its ability to reflect the variance and covariance of the data. Because of its tendency to be sensitive to the sample size, other fit indices (e.g., GFI, NFI, and CFI) were considered in conjunction with the chi-square test. For the statistical significance of the parameter estimates, t-values were used. The results of the confirmatory factor analysis indicated that the chi-square was 16.86 (p<0.05), the goodness-of-fit index (GFI) was 0.99, the normed fit index (NFI) was 0.98, the comparative fit index (CFI) was 0.99, and the root mean square error of approximation (RMSEA) was 0.099. Generally, fit statistics greater than or equal to 0.90 for the GFI, the NFI, and the CFI indicate a good model fit (Bagozzi and Yi, 1988; Mulaik et al., 1989). The RMSEA was lower than 0.1 as recommended by Steiger and Lind (1980). Thus, the measurement model provided a good fit to the observed data. To assess the validity, this study used the fit of model and the statistical significance of each standardized path coefficient. All the standardized path coefficients for the items were significant (t>1.96). Thus, the results confirmed the satisfactory validity of the instrument.

# 3.4 Hypothesis test

The structural equation model was assessed to test the hypotheses. The path estimates indicated that the coupon expiration date was a significant predictor of consumer's perception of coupon value (H1;  $\gamma$ =0.19, p<0.01). The coupon stamp had a significant effect on the consumer's perception of coupon value (H2;  $\gamma$ =0.16, p<0.01). Therefore, all the hypothesized relationships were supported at each level of significance.

The impacts of the coupon expiration date and stamp on the value perception of coupons were compared between college students and office workers. The path model was assessed to test each hypothesis.

#### < Insert Figure 2 Here>

As shown in Figure 2, all the path estimates for the student group were significant at the 0.01 level; thus, Hypotheses 1 and 2 were supported. However, in terms of the office worker group, the coupon stamp did not have a significant effect on the consumer's perception of coupon value; therefore, only Hypothesis 1 was supported.

## 4. Discussion and Conclusion

Many marketing managers use coupons as a promotional tool to increase purchase intention. Coupons play a particularly important role in coffee shop promotions. In this regards, this study, focusing on coupon promotions, examined the impacts of the coupon expiration date and stamp on consumers' perceived value of coupons.

The results suggest that consumers' perceived the value of coupons increases when the coupon expiration date is adequate. Therefore, providing coupons with more adequate expiration periods should increase the value perception of coupons and encourage coupon use. In addition, when a consumer receives a coupon stamp at a coffee shop, the consumer evaluates the number of stamps needed for getting a free cup of coffee. Thus, providing coupons with adequate numbers of stamps should increase consumers' value perception of coupons.

This study compared the impacts of the coupon expiration date and stamp on the value perception of coupons between college students and office workers. The results of the path analyses indicated that, in the student group, both the coupon expiration date and stamp had significant effects on the consumers' value perception of coupons; in the office worker group, only the coupon expiration date had a significant effect. These findings have practical implications for marketing managers and practitioners looking to improve consumers' value perception of coupons. If a coffee shop manager were to offer a coupon with a more adequate expiration period, the consumers' perceived value of coupons would increase. Accordingly, the consumers would be more likely to use the coupon when they visit the same brand coffee shop or frequently use the same coupon.

It should be noted as a limitation of this study that the respondents were residents of Seoul. Therefore, any generalization of the study findings to groups outside the sample profile should be implemented with caution. In this regard, future research using data representing a wider range of cities is warranted to verify the result of this study.

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Table 1. Demographics of respondents

| Variable        | Item                             | Frequency | Percentage (%) |
|-----------------|----------------------------------|-----------|----------------|
| Gender          | Male                             | 253       | 53.3           |
|                 | Female                           | 222       | 46.7           |
| Age             | <19                              | 77        | 16.2           |
|                 | 20-29                            | 358       | 75.4           |
|                 | 30-39                            | 28        | 5.9            |
|                 | >40                              | 12        | 2.5            |
| Education level | High school                      | 7         | 1.5            |
|                 | Associate's or Bachelor's degree | 412       | 86.8           |
|                 | Master's degree or above         | 56        | 11.7           |
| Monthly income  | <1.5 million won                 | 390       | 82.1           |
|                 | 1.5-2.5 million won              | 39        | 8.2            |
|                 | 2.5-3.5 million won              | 20        | 4.2            |
|                 | >3.5 million won                 | 26        | 5.5            |

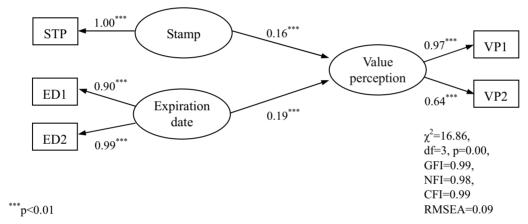
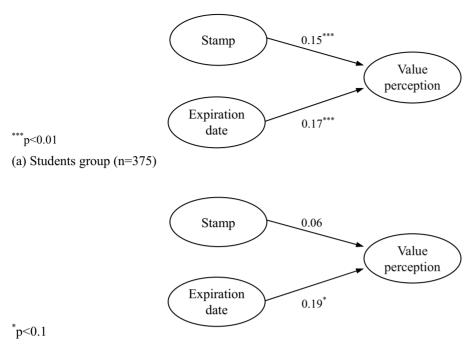


Figure 1. Results of the covariance structure analysis



(b) Office workers group (n=100)

Figure 2. Comparison of two path models