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# Effects of Visible and Invisible Factors and Buying Impulse Intention upon Store Loyalty: Focused on Physical Evidence and Word-of-Mouth of Discount Store\*

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Hoe-Chang Yang\*\*, Ho-Keun Ahn\*\*\*, Young-Chul Lee\*\*\*\*

## Abstract

**Purpose** – This study aimed to understand the influence of visible factors directly shown to and experienced by consumers such as physical evidence, and invisible factors obtained through acquaintances or other experienced consumers such as word-of-mouth, in the discount stores' marketing communication on impulse buying intention and store loyalty.

**Research Design, Data, and Methodology** – This study examined the effect of factors in discount stores' marketing communication, for instance, physical evidence, word-of-mouth, and buying impulse intention. The questionnaire survey resulted in 68 completed questionnaires.

**Results** – Physical evidence and word-of-mouth have a statistically significant positive effect on store loyalty. The results of regression analysis regarding whether visible or invisible factors have more impact showed that word-of-mouth has a statistically significant positive effect on store loyalty. With regard to impulse buying intention, only word-of-mouth was statistically significant.

**Conclusion** – These results suggested that visible and invisible factors that appeal to customers are very important. In particular, the results suggested that stores should create invisible factors (e.g., positive word-of-mouth) for their customers.

**Keywords** : Word-Of-Mouth, Discount Store, Impulse Buying Intention, Store Loyalty.

**JEL Classifications** : L14, M31, M37, N35, N75.

## 1. Introduction

Sales trends of discount store as of August 2012 was about 3.3% down than that of previous year. (Ministry of Knowledge Economy, 2012). The result is thought to have relation with external evidence factors such as bad economic situation and compulsory off day. So and Hwang (2012) reported that the discount store could be successfully developed in the Korean market owing to understanding of consumers' demand patterns enough to satisfy convenience and economy. They reported that the discount store carefully investigated marketing area from point of view of convenience to be placed at good access and to keep various kinds of latest products and let consumers buy products at one place; And, it had price competitiveness almost same as price of online shopping malls and had flexible price system to compete with competitors and to give consumers reliability from economic point of view (Eggert et al., 2012). Many previous studies investigated discount store of Korea and the market's marketing communication factors: This study has paid attention to the fact that discount store of Korea relied upon visible aspect than overseas supermarket did. This is because discount store of Korea that has kept physical evidence as good as that of overseas discount store shall transfer cost burden to consumers (e.g., Kim et al., 2007; Kim & Kim, 2008; So & Hwang, 2012). In other words, competition of the investment for visible area prevents discount store from lowering price to produce economic decline as well as less sales.

This study examined not only visible factor of physical evidence of discount store but also invisible factor of words of mouth having influence upon store loyalty. And, the study investigated effects of the visible and invisible factors upon consumers' buying impulse intention, and roles of buying impulse intention at the relation between visible and invisible factors and store loyalty to find out high competitiveness of discount store.

## 2. Theoretical Background

### 2.1. Physical evidence

In this study, physical evidence that made appearance in the 1970s was divided into physical structure, physical stimulus and

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\*\* Assistant Professor, Department of Distribution Management, JangAn University. Tel: +82-10-8897-1002. Fax:+82-31-299-3131. E-mail: pricezzang@empal.com.

\*\*\* Ph D Candidate, Department of Management, AnYang University, Tel: +82-10-9723-0001. E-mail: ky0354@hanmail.net.

\*\*\*\* Professor, Department of Distribution Management, JangAn University. Tel: +82-10-3289-3125. Fax:+82-31-299-3131. E-mail: leeyc@jangan.ac.kr.

symbolic artifacts to interpret it from point of view of human factors as well as social relations considering customers' emotional areas, hinderance against consciousness and effects upon the acts. Bitner (1992) argued that the physical evidence had very much important influence because customers were given services under business evidence. In other words, physical evidence of the service can provide customers with information on service quality and/or commodity assortment. As said before, the discount store in the nation have advantages of much splendid and clean evidence to provide customers with comfort, and they are unable to sell large quantity of products at low prices by low-price high-volume strategy.

## 2.2. Word-of-mouth

According to Aaker & Myers (1982), the words-of-mouth, an invisible factor, is said to be "communication of information source that an audience tells friends and/or fellows", and Assael (1995) defined word-of mouth to be communication between two or more of individuals, for instance, reference groups, customers and/or sellers.

The word-of-mouth is defined to be exchange of consumption experience between consumers (Borgida & Nisbett, 1977), and affirmative psychological state satisfied with the purchase can do not only affirmative word-of-mouth communication but also recommendation to have great influence upon store loyalty (Oliver & Swan, 1989). These days, social network service (SNS) has been developed so that word-of-mouth may have much more influence upon other factors do.

## 2.3. Buying Impulse Intention

Consumers are forced to spend money owing to various kinds of marketing strategies of enterprises. The impulse that is a kind of psychological phenomenon under all types of situations makes people want to take sudden and powerful actions by extrinsic stimulus (Evenden, 1999). Under such a state, people's acts are highly motivated to be difficult to control acts reasonably (Louge, 1988). The buying impulse intention is said to be internal state that consumers want to buy either products or services: To produce buying impulse intention, consumers shall be firstly exposed to stimulus to take actions by psychological impulse that is impulse buying (Rock, 1987). The impulse buying can be done by product, buying situation and personal characteristics (Seong et al., 2012). In this study, not only visible factor of physical evidence but also invisible factor of word-of-mouth had influence upon buying impulse intention: This study examined effects of physical evidence and word-of-mouth upon customers' store loyalty.

## 2.4. Customers' Store Loyalty

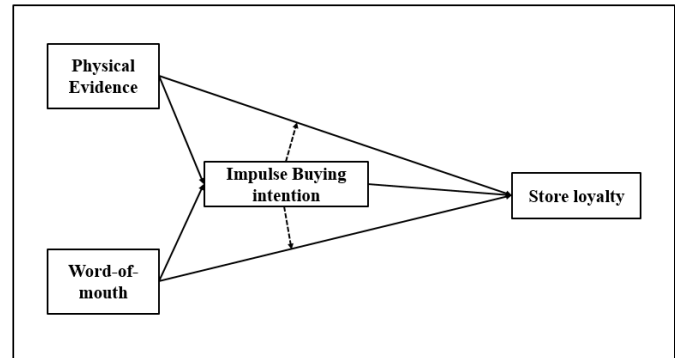
Song & Yang (2012) reported that customers' store loyalty is said to be customers' affection toward specific product, service

and brand (Kotler, 2000) to include actual acts as well as intentional acts. The loyalty can be divided into behavioral loyalty that indicates continuous affection and customary buying, attitude loyalty that indicates favorable attitude and buying intention, and general loyalty of both (Dick & Basu, 1994; Konecnik & Gartner, 2007), and it can be divided into cognitive loyalty, emotional loyalty and intentional loyalty from comprehensive point of view (Oliver, 2006).

In this study, store loyalty that is outcome variable has influence upon physical evidence, word-of-mouth and buying impulse intention that is consumer's personal characteristic, and it is important for discount store to increase sales and to attain competitive advantages.

## 3. Models and Hypotheses

This study examined effect of marketing communication factors of discount store upon store loyalty, for instance, physical evidence, word-of-mouth and buying impulse intention. In particular, the study investigated effects of visible factors as well as invisible factors upon store loyalty to find out conditions that could get competitiveness of general supermarket by lowering prices. The study set up research model and hypotheses considering relations of previous studies.



<Figure 1> Research Model

- Hypothesis 1. The physical evidence shall have positive influence upon store loyalty.
- Hypothesis 2. The word-of-mouth shall have positive influence upon store loyalty.
- Hypothesis 3. The buying impulse intention shall have positive influence upon store loyalty.
- Hypothesis 4. The physical evidence shall have positive influence upon buying impulse intention.
- Hypothesis 5. The word-of-mouth shall have positive influence upon buying impulse intention.
- Hypothesis 6. The buying intention shall moderate between physical evidence and store loyalty.
- Hypothesis 7. The buying impulse intention shall moderate between word-of-mouth and store loyalty.
- Hypothesis 8. The buying impulse intention shall mediate be-

tween physical evidence and store loyalty.

Hypothesis 9. The buying impulse intention shall mediate between word-of-mouth and store loyalty.

## 4. Empirical Analysis

### 4.1. Research Designs and Data Collection

This study examined effects of marketing communication factors of general supermarket such as physical evidence, word-of-mouth and buying impulse intention upon store loyalty, and it conducted pilot test of mediation effect and moderation effect of consumers' buying impulse intention with visible evidence, physical evidence, word-of-mouth and store loyalty. The subject was consumers at metropolitan area. 68 copies of questionnaires were used to do questionnaire survey. The demographic characteristics of the sample were shown in Table 1.

### 4.2. Methods

The following self-report measures were used. Specifically, Bitner (1992) each 4 item, 5-point likert scale measure was used to assess physical evidence and wor-of-mouth, respectively. Beatty & Ferrell (1998) 3 item, 5-point likert scale measure was used to assess buying impulse intention, Zeithaml et al. (1996) 3 item, 5-point likert scale measure was used to assess store loyalty.

### 4.3. Reliability and Validity of Measurement Scale

<Table 1> Demographic Composition of participants

Characteristics	Classify	Frequency	Percent(%)
Gender	man	23	33.8
	woman	44	64.7
Marital status	married	38	55.9
	single	28	41.2
Age	under 30 years old	23	33.8
	30 ~ 40	18	26.5
	exceed 40 years old	27	39.7

\* Note) 1 participant in Gender, 2 participants in marital status was missing

Cronbach Alpha was used to inspect internal consistency of measuring items and to test reliability. Nunnally (1978) reported that Cronbach Alpha coefficient should exceed 0.7. In this study, reliability between the variables exceeded 0.727 to have satisfactory reliability were shown in <Table 2>. The pilot test could not analyze confirmatory factor analysis (CFA) because of small of number of the interviewees. SPSS was used to do fac-

tor analysis and to inspect correlation and do principal component analysis of all of the questions: All of the factors were found to be suitable and to have validity, for instance, all of the values of Kaiser-Meyer-Olkin test were found to exceed .710.

<Table 2> Reliability

Variables	Final items	Cronbach's $\alpha$
Physical evidence	4	.727
word-of-mouth	4	.827
Buying impulse intention	3	.913
Store Loyalty	3	.903

### 4.4. Correlation Analysis

The correlation analysis was done to inspect relations and directional properties of the variables. The results were shown in <Table 3>.

<Table 3> Mean, Standard Deviation and Correlation Matrix (N=68)

	1	2	3	4
1. Physical evidence	-			
2. Word-of-mouth	.612**	-		
3. Buying impulse intention	.362**	.4951**	-	
4. Store Loyalty	.463**	.502**	.581**	-
Mean	3.21	3.01	3.43	3.55
Standard Deviation	.754	.829	.948	.956

Note) \* p < .05, \*\* p < .01

### 4.5. Hypothesis Test

Regression analysis was done by controlling gender, age, marital status and income. Physical evidence ( $\beta = .488, p < .01$ ), word-of-mouth ( $\beta = .559, p < .01$ ) and buying impulse intention ( $\beta = .597, p < .01$ ) had significantly positive influence upon store loyalty. Therefore, hypothesis 1, 2 and 3 were supported. Not only physical evidence ( $\beta = .408, p < .01$ ) but also word-of-mouth ( $\beta = .551, p < .01$ ) had significantly positive influence upon buying impulse intention, respectively. So, hypothesis 4 and 5 were supported. Interestingly, multiple regression results for which of the two factors (e.g., physical evidence and word-of-mouth) affect the buying impulse intention showed that the word-of-mouth had significantly positive influence upon buying impulse intention ( $\beta = .474, p < .01$ ), but physical evidence had no positive influence ( $\beta = .128, p = .341$ ).

The result of multiple regression analysis showed that buying impulse intention had no moderating effect between physical evidence ( $\beta = -.661, p = .205$ ) and store loyalty, word-of-mouth and store loyalty ( $\beta = -.795, p = .088$ ), respectively. But, word-of-mouth was likely to have significant influence a little so that it was needed to investigate again in the future. Therefore, hypothesis 6 and 7 were rejected.

We examined Baron and Kenny's (1986) three-step mediated regression analysis, buying impulse intention was partially mediate between physical evidence and store loyalty, word-of-mouth, respectively. The results were shown in Table 4. Therefore, hypothesis 8 and 9 were supported.

<Table 4> Results of three-step mediated regression analysis

Mediating variable	Independent variables	step	dependent variable	R <sup>2</sup>	F
Buying impulse intention	Physical evidence	1( $\beta$ 1)	.408**	.434	8.346**
		2( $\beta$ 2)	.488**		
		3( $\beta$ 3,IV)	.294**		
		3( $\beta$ 4,MV)	.475**		
	word-of-mouth	1( $\beta$ 1)	.551**	.495	8.413**
		2( $\beta$ 2)	.559**		
		3( $\beta$ 3,IV)	.329**		
		3( $\beta$ 4,MV)	.417**		

Note) IV means independent variable, MV means mediating variable

## 5. Discussions and Summary

This study examined effects of visible factor which is well shown directly and well experienced to consumers such as physical evidence, and invisible factor which is get through acquaintances or other experienced consumers such as word-of-mouth in the discount stores' marketing communication on impulse buying intention and store loyalty.

The study had several implications: First, visible factors such as physical evidence, word-of-mouth and buying impulse intention were found to have positive influence upon store loyalty. In other words, consumers could enhance store loyalty by physical evidence and positive word-of-mouth. But when we compared to the influence of the two factors, physical evidence ( $\beta = .244$ ,  $p = .057$ ) had marginally influence, only while word-of-mouth ( $\beta = .410$ ,  $p = <.01$ ) had positively significant influence. So, discount stores need to inspect investment of physical evidence again. The discount stores are likely to make use of funds to invest in maintaining and improving the physical evidence for the source of low price policy. Second, not only physical evidence but also word-of-mouth had positive influence upon consumers' buying impulse. But when we compared to the influence of the two factors, Affirmative word-of-mouth only had influence upon buying impulse intention to support aforementioned argument. Finally, consumers' buying impulse had partially mediated influence between physical evidence and store loyalty, word-of-mouth and store loyalty, respectively. Physical evidence and affirmative word-of-mouth that could enhance customer's store loyalty were important, and various kinds of buying impulse factors such as VMD (visual merchandising) of product

display and packing that made consumers have buying impulse at shops should be satisfied.

This study also had several limitations: First, number of the interviewees of pilot test was small to be difficult to generalize the findings. So, more interviewees shall be used to investigate again. Second, not only visible factor but also invisible factor can include physical evidence as well as word-of-mouth only that is subfactor of marketing communication. Further studies need to investigate various kinds of variables and to find out conditions that can have influence upon buying impulse intention and/or store loyalty. Finally, in this study, self-checking questionnaire of consumers only was used and cross-sectional study had limitations. Not only another research method that can overcome self-checking questionnaire but also longitudinal study's time series material shall be used to research from long-term point of view.

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