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The Effects of the Store Window Type on Consumers' Perception and Shopping Attitudes Through the Use of Digital Pictures

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ABSTRACT

This research focuses on determining the effects of a store window type (flat or arcade) on consumers' perception of store windows (promotion, merchandise and fashion) and shopping attitudes (intentions for store entry and purchase) in the context of retail clothing sales. To test the assumption that there are relationships between various types of store windows and consumers' perception of store windows and shopping attitudes, a study was organized based upon digital pictures of two types of store windows hypothetically located in a big store. According to the results, consumers seem to have a more positive perception of flat windows than arcade windows with respect to promotion, merchandise and fashion. Compared to females, males evaluated the store window more positively. Managerial implications are discussed and directions for future research are proposed.

Key Words: Store window, Clothing retail, Perceptions, Shopping attitude, Digital picture

1. INTRODUCTION

In recent years, clothing retail competition has generally intensified due to the consequences of new technologies, more sophisticated management practices and the internet. TV, digital billboards and catalogues have all commonly been used in the advertising sector. These communication instruments have an effect on consumers' shopping attitudes in an increasingly competitive marketplace. In addition, the designing of store windows has continued to have an important effect on advertising products. This is an important point to be taken into consideration by both clothing retailers and designers.

Store window displays are regarded as a key instrument of a retailer's communication and visual merchandising strategy [1,2]. They are an integral part of a consumer's surrounding during his/her shopping experience and therefore have an impact on consumer behavior in retail settings. Window displays serve two main purposes: to identify the store and its product (e.g. promotion, merchandise and fashion), and to induce consumers to have shopping attitudes [3].

Window displays give a wide variety of information about a store. By showing a representative merchandise offering, a store can create an overall image. By showing fashional or seasonal goods, a store can show that it is contemporary. By showing sale items, a store can lure price-conscious consumers. By showing eye-catching displays that have little to do with its merchandise offering, a store can attract pedestrians' attention. By showing public service messages (e.g., a window display for the Jerry Lewis Telethon), a store can show its concern for the community [3]. Therefore, consumers may often use window displays to obtain information about a product category (e.g., the latest trends/innovations) and a retail clothing store [1,2,4]. Although store windows have a very important effect on consumers, there has not been significant empirical evidence regarding the effect of window displays on consumers' shopping attitudes. In addition, it is not clear how consumers perceive different types of store windows in the sale of retail clothing.

There are about half a dozen different types of window structures presently being used by retail stores, as discussed by a number of researchers [3,5,6]. However, of these, there are three major types in the context of clothing retailing from which many combinations are possible: flat, arcade and corner windows. For flat windows, storefront glazing is projected as far forward as possible and built in a straight line, with an entrance

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door aligned or set back from this line [5]. The arcade window extends from a store's entrance set back between two windows, which allow a store with fewer frontages to increase its windows space in which to show merchandise [6]. Because the store windows on linear axes such as flat and arcade windows are the subject of this work, corner windows specifically designed for those shops located on corner properties are excluded from this study. Hence, this research seeks to investigate the effect of the two most common types of store windows (flat and arcade) in the context of retail clothing sales. Specifically, using digital pictures of two types of store windows, this study examines the relationships between consumers' perception of store windows and shopping attitudes with general characteristics of store windows.

1.1. Consumers' Perception of Store Windows and Shopping Attitudes

A number of previous studies have supported the idea that store image attributes play an important role in affecting consumers' shopping attitudes and patronage behaviors [7-15]. These researchers have primarily examined the effect of environmental attributes on consumer evaluations of store image. In these studies, a link has been found between consumers' perception of store windows (promotion, merchandise and fashion) and shopping attitudes such as intention to purchase a product. Available studies generally include consumers' shopping attitudes relating to window displays. Sen et al. [1] for instance, used Feldman and Lynch's [16] accessibility–diagnosticity framework to examine how the information acquired from window displays might be related to two key shopping attitudes: entry and purchase. This framework also enabled them to examine the role of consumers' product-category and store-related knowledge in moderating the relationships between such acquisitions and their shopping attitudes.

A large body of literature [16,17] suggests that consumers' likelihood of using a particular informational input to make a decision depends on both its accessibility and perceived diagnosticity. More importantly, certain types of information culled from window displays are likely to be diagnostic to the store-entry decision. Consumers may enter a store based on its window displays for several different reasons. They may enter to obtain further information about a specific line or item of merchandise that they saw displayed in the store window, whether or not they intend to purchase that item at that time in that store. Similarly, consumers may enter to learn more about or take advantage of the sale they saw announced in the window display. More generally, store entry may result from consumers' affinity for the types of merchandise a store displays in its windows. In other words, because of their diagnosticity to the store entry decision, the observed store-related elements of window displays, such as store merchandise, can serve as a direct incentive to enter the store [1].

Purchase intentions have been widely-used in the literature as a predictor of subsequent purchases [14]. A number of studies have supported the notion that store image is an important component of store patronage. More specifically, Buckley [18] found a link between store image and intention to purchase merchandise. Therefore, window displays can affect store-wide sales through numerous mechanisms. For example, consumers' decision to patronize a particular store may be based on information obtained from its windows, regarding overall image and range of merchandise. More specifically, window displays can act as a more direct point-of-purchase promotional device by stimulating the purchase probability of the displayed merchandise.

2. RESEARCH HYPOTHESES

As the argument discussed in this work store window types may constitute one of the most important factors influencing consumers' perception and shopping attitudes [1,19]. It is believed that consumers perceive flat windows as more positive than arcade windows. The freedom to browse without the pressure from a salesperson to buy is important for the respondents.

Another one of the objectives of the present study was to expand the effects of gender as an important independent variable on perception. It is believed that window displays are perceived differently by males and females, i.e. male consumers are more positive towards window perception than the female consumers. In fact, gender researchers have attributed such differences between males and females to a variety of social and biological factors [20]. In the literature, the concept of gender-role identification is central and is considered to be a major factor in the development of behavioral differences. Some scholars suggest that male-female differences in aptitude and personality traits often reflect traditional gender roles in society [20]. Researchers have found that regardless of the traditional image of a described product, and regardless of the actual gender of the perceiver, consumers prefer products described in terms that matched the gender attributes that they perceive as both characteristic of and important to themselves [21]. According to Costa et al. [22], males seem to be more analytical and logical, since they focus on a few salient attributes and females seem to be more subjective and intuitive, since they look for relationships between all the available attributes [20]. In fact, compared to males, females seem to be more accurate in decoding nonverbal attributes [23] and are considered to be more visually-oriented, more intrinsically motivated, and more romantic [24]. Another study by Dube and Morgan [25] found that female's satisfaction judgments were largely influenced by their initial negative emotions, whereas male's satisfaction judgments depended on their first positive emotions, suggesting a primacy effect for both genders. Laufer and Gillespie [26] have explored differences in blame attributions between males and females in a consumer context. The results of their experiment show that females blame a company more than males for a product harm crisis because they feel more personally vulnerable to a similar crisis occurring to them. Martin [27] has shown the impact of gender on

mood effects in relation to attitude toward advertisement and brand attitudes. The findings of this work support previous research that female gender and sad moods, respectively, result in more detailed processing. Therefore, the literature generally suggests that males and females think and behave differently due to the alternative roles they play in society. To test these hypotheses, the following methods were used in carrying out this research.

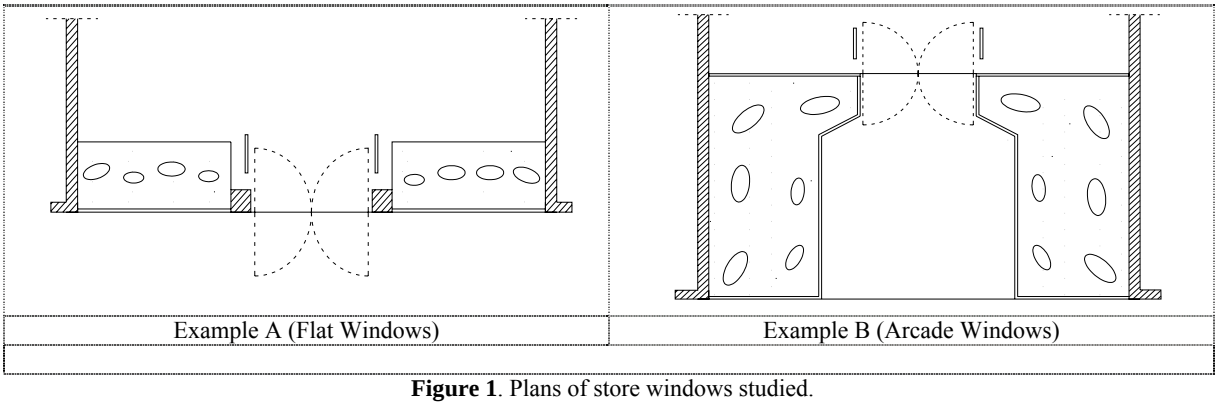
3. METHODOLOGY

3.1. Questionnaire Design

Based on the main research hypotheses presented above, two dimensions of dependent variables were developed; i.e. consumers' perception of store windows (promotion, merchandise and fashion) and shopping attitudes (intentions for store entry and purchase). These were measured with a questionnaire based on multiple-item measurement scales that had been validated and found to be reliable in previous research [1,12,14,19,28,29]. Based on the previous research, perceived promotion, merchandise and fashion items displayed in Table 1, were measured using seven-point Likert-type scales, ranging from "1 = unfavorable" to 7 = favorable". Similarly, store entry and purchase items were measured using seven-point Likert-type scales, ranging from "1 = strongly disagree" to 7 = strongly agree". The mean, standard deviation and *t*-values for each of the items are presented in Table 3.

3.2. Procedure

The data for this research was obtained from shoppers' ratings of digital pictures of two hypothetical clothing stores. Two different types of store windows, i.e. flat and arcade, showing completely inside the store were prepared (Figure 1 and Figure 2). As known, there are many factors that might affect the dependent variables, and many such factors might be more influential than the window type (e.g., information about a sale, store name, prices of merchandise, etc). Besides, the influence of window displays is likely to depend on various characteristics of the consumer, the product category, the retail context, and the shopping task (e.g. shopping goal, planned versus unplanned, etc). To minimize the likelihood of misjudgment, the window type was alternated through digital pictures and rest of the details of the two suggestions was presented quite similar to each other. That is, both of the window types in the hypothetical stores were decorated with the same mannequins dressed up in the same clothes. In addition, each window type was illuminated the same (all directed downwards, spot halogen lights, each 13 W, the same color and on the ceiling). For each window type, there was no background wall behind the mannequins, and the background was enriched with a view of the interior, the same view used in each example.



Example A (Flat Windows) | Example B (Arcade Windows)

Figure 1. Plans of store windows studied.

As mentioned by Holbrook [30], whether at the stage of study design, data collection, analysis of results, presentation of findings, or implementation of strategies, marketing researchers and managers repeatedly find themselves deeply concerned with the visualization of information. Researchers might use pictorial materials as stimuli in experimental treatments, as part of a survey instrument. Indeed, some commentators have explicitly designated the addition of digital pictures as a key step toward the enhanced visualization of information [31-35]. Concerning one more visual aspect of marketing strategy, the use of digital pictures appears to offer clear opportunities for improving the effectiveness of advertising and other forms of promotional communication. As suggested by Holbrook [30], digital pictures provide a richly rewarding area in which to develop a stream of programmatic research geared toward the improvement of visual communication in the work of marketing researchers and managers. Meanwhile, the whole point of digital pictures in marketing is to enhance the vividness, clarity, realism, and depth of the pictorial displays in ways that promise to enrich our visualization of stimuli, products, brands, retail stores, consumer environments, advertisements, data, functional relationships, and other relevant information.

Example A (Flat Windows) Example B (Arcade Windows)

Figure 2. Digital pictures of store windows studied.

3.3. Respondents

The data for the present study was obtained by face-to-face meetings by an interviewer in the period of five weeks in 2004. The respondents were randomly selected among consumers who prefer shopping in one of the big shopping malls of Ankara, Turkey. The detailed digital pictures of two types of store windows hypothetically located in a big store were shown to respondents on a white A4 size paper. At the beginning of the study, the respondents were given brief information about the survey and were then asked to answer the questionnaire by looking at the detailed digital pictures. The research was conducted at different times of the day, during the weekdays. It took the respondents approximately fifteen minutes to complete each of the questionnaires. One hundred and fifty two people participated in the experiment. 59% of the respondents were men, 41% were women. 56% of the respondents were between 18 and 29, 44% were between 30 and 60 years old.

3.4. Statistical Analysis

There are many factors that affect the shopping attitudes of consumers. Of these factors, types of store windows and gender were considered and accepted as independent variables. In order to test the hypotheses of the study, the model of the research was formed in a 2x2 factorial design (store windows x gender). As a result of this research, the Cronbach alpha coefficients of the dependent variables were calculated and a correlation test was used to determine if there were relationships between the dependent variables. Afterwards, the categorical means of the data was defined with their standard deviations and *t*-values. Afterwards, to examine the effects of the window type of a store and gender variables on consumers' perception of store windows and shopping attitudes in the context of clothing retail, the appropriate technique of multivariate analysis of variance (MANOVA) was used. To compare the significant means of the variances in the analysis of variations, the data is given in graphical form.

4. RESULTS

The reliability of the items were tested with Cronbach's test and reported in Table 1. The Cronbach alpha coefficient for the set of consumers' perception of store window items and shopping attitudes items were 0.87 and 0.89, respectively. The alpha coefficients of all items were above 0.60, representing good reliability according to consumer researchers [14,36,37]. These items may therefore be considered to be of high reliability.

Table 1. Results of reliability analysis of the dependent variables.

Dependent Variables	Scale Items	Items Reliability	Scale Reliability
Promotion	More favorable to notice the special discounts.	0.91	0.87
Merchandise	More favorable to get some ideas about the products and the price range of the clothing sold in the store.	0.91	
Fashion	More favorable the latest clothing styles while passing in front of the shop.	0.90	
Enter	More attractive and inviting when someone decides to enter a store.	0.91	0.89
Purchase	Gives me a freedom to decide on purchase without being disturbed by the salesman.	0.91	

Notes: For each dependent variable, the item reliability and scale reliability are provided.

According to the data of this research, the relationship between tested independent variables and dependent variables were examined. In other words, the relationship between consumers' perceptions (promotion, merchandise and fashion) and shopping attitudes (intentions for store entry and purchase) items depending on types of store windows (flat and arcade) were tested using Pearson correlations. The correlations between the dependent variables, perceptions and shopping attitudes are shown in Table 2.

Table 2. Pearson correlations between the dependent variables.

Dependent Variables	Promotion	Merchandise	Fashion	Enter	Purchase
Promotion	1.000				
Merchandise	0.659**	1.000			
Fashion	0.677**	0.764**	1.000		
Enter	0.585**	0.653**	0.696**	1.000	
Purchase	0.535**	0.642**	0.692**	0.803**	1.000

Notes: ** Correlation is significant at the $p < 0.01$ level (2-tailed).

According to the results of Pearson correlations in Table 2, it has been found that there are statistically significant relationships among the variables ($p < 0.01$ level). According to this, it can be said that there are positive and high reliable relationships among the variables.

In this part of the study, the statistical differences between stores' windows type (flat or arcade) and gender groups with consumers' perception of store windows and shopping attitudes were analyzed. The results of the research questionnaire are given in Table 3 as the mean, standard deviation and *t*-value for each of the items of the dependent variables.

Table 3. Means, SD and *t*-values of the dependent variables.

Dependent Variables	Types of Store Windows		Gender of Consumers	
	Flat	Arcade	Male	Female
	Mean[a](SD)	Mean (SD) *t*-value[b]	Mean (SD)	Mean (SD) *t*-value
Promotion	5.70 (1.31)	3.85 (1.78) 19.9*	4.88 (1.68)	4.58 (2.20) 30.2*
Merchandise	5.62 (1.25)	4.34 (1.73) 22.7*	5.22 (1.46)	4.66 (2.04) 31.4*
Fashion	5.75 (1.30)	3.78 (1.71) 19.5*	5.05 (1.60)	4.36 (2.10) 29.1*
Enter	5.46 (1.37)	3.41 (1.65) 18.5*	4.82 (1.51)	3.88 (2.14) 26.8*
Purchase	5.51 (1.52)	3.44 (1.55) 19.5*	4.74 (1.5)	3.65 (1.90) 26.3*

Notes: SD= Standard Déviation; *: $p < 0.001$

a: Variable means ranged from 1 to 7, with higher numbers representing more positive responses.

b: *t*-values: It is result of comparison of dependent variables with types of store windows and gender variables.

Table 3 shows that the perceptions of the various window types (flat or arcade as seen in Figure 1 and Figure 2) and gender (male, female) groups varies according to the consumers' perception of store windows and shopping attitudes. From the evaluation of *t*-values, it can be seen that consumers have more positive tendency about flat windows than arcade windows. Moreover, the data indicates that the male consumers have a more positive perception of flat/arcade windows of stores than the female

consumers. Thus, the differences between these dependent variables, including consumers' perception of store windows and shopping attitudes, were tested using MANOVA. The results of this are given in Table 4.

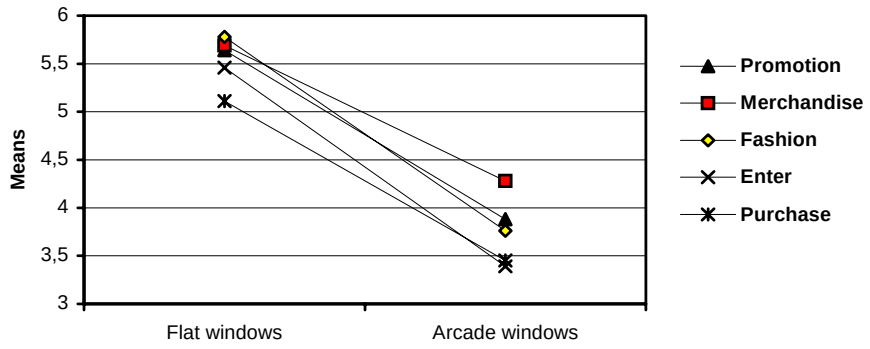
Table 4. MANOVA of the dependent variables.

Source	F	df	P	Results
Store windows	35.612	5	0.000	$p < 0.001$
Gender	5.294	5	0.000	$p < 0.001$
Store windows *Gender	1.444	5	0.208	ns

Notes: α: 0.001 is the level of significance. ns: not significant.

According to the MANOVA results, the main effects (store windows and gender) were found to be significant ($p < 0.001$ level). On the other hand, the effect of double interaction (store windows*gender) had no significant effect on consumers' perception and shopping attitudes ($p < 0.05$). In conclusion, it can be said that differences among flat/arcade windows of retail clothing stores, consumers' gender is effective on consumers' perception of store windows and shopping attitudes. However, double comparison is not effective on consumers' perceptions of store windows and shopping attitudes.

The graphs of differences between consumers' evaluations of various types of store windows (flat or arcade) depending on their perception of store windows (promotion, merchandise and fashion) and shopping attitudes (store entry and purchase) are given in Figure 3.



Notes: Variable means ranged from 1 to 7, with higher numbers representing more positive responses.

Figure 3. Effects of types of windows on dependent variables.

In Figure 3, it was found that the perceptions of each of the two different types of store windows was statistically different for promotion (F= 80.30, df= 1, $p < 0.001$), merchandise (F= 58.37, df= 1, $p < 0.001$), fashion (F= 128.35, df= 1, $p < 0.001$), enter (F= 136.77, df= 1, $p < 0.001$) and purchase variables (F= 83.68, df= 1, $p < 0.001$). For all variables, the range of store windows from the most positive value to the most negative value is arranged as **flat windows > arcade windows**. In sum, it has been clearly found that there is a statistically significant difference ($p < 0.001$ level) between the flat windows type and the arcade windows type for these variables.

5. DISCUSSION

This paper reveals a significant relationship between types of store windows with consumers' perceptions of store image and shopping attitudes. The results have shown that consumers' perceptions of two different types of store windows regarding store image attributes such as promotion merchandise and fashion are different and the difference among them is statistically significant ($p < 0.001$ level). According to the results of the study, consumers have a more positive perception of flat windows than arcade windows with respect to promotion, merchandise and fashion.

The study also found that types of store windows play an important role on consumers' store entry and product purchase attitudes ($p < 0.001$ level). According to these results, consumers have a more positive perception of flat windows than arcade windows in connection with shopping attitudes such as store entry and product purchase. This confirms the results of Sen et al. [1] who report a similar finding in relation to the effects on consumers' shopping decisions of store windows. Considering the results of this study and its discussions, the respondents mentioned that the arcade window type was less popular compared to the flat store window type, as the former type made them feel as if they were already in the store, stressing that at any time they might be disturbed by a salesperson.

The results of the work suggest that retailers and

designers may be able to easily attract consumers' perception using flat windows. And for the arcade type, other solutions might be provided (such as hiding the interior seen from outside to make the consumers feel that they are still outside). As mentioned, this work was carried out using consumers of a big shopping mall asking them to answer the questions as if they were in a big shopping mall.

The other significant result of this study is the difference in gender groups according to flat and arcade windows. In fact, females were more critical than males about the window display types. This result supports the findings of Dube and Morgan [25], which concluded that female's satisfaction judgments were largely influenced by their initial negative emotions, whereas male's satisfaction judgments depended on their first positive emotions, suggesting a primacy effect for both genders. Moreover, Sommer et al. [38] found that females spent more time in the store than did males. From this result, it can be inferred that females are more critical in their shopping attitudes.

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