



THE INFLUENCE OF KEY FACTORS OF VISUAL MERCHANDISING ON IMPULSIVE BUYING

Jelena Franjković, Marta Botkuljak, Davor Dujak

Josip Juraj Strossmayer University of Osijek, Osijek, Croatia

ABSTRACT. Background: Modern retail is experiencing an accelerated transformation with online sales growth, further accelerated by the COVID-19 pandemic. Nevertheless, physical stores, especially grocery stores, are still the key to retail business and are likely to remain so for the foreseeable future. Competition among retailers is becoming more pronounced and aggressive, and the expectations of modern consumers from retailers are stronger and more precise - they require the creativity of retailers in attracting and motivating them to enter their stores and return. Once consumers are in the store, the goal of retailers is to make them buy as much as possible. In modern retail, visual merchandising has become one of the crucial factors on the supply side by achieving a comfortable in-store environment and directing customers toward targeted shopping behaviour. The aim of this paper is to investigate which factors of visual merchandising are successful in encouraging impulsive consumer buying.

Methods: The article conducted an extensive review of the previous literature, while the primary research was conducted on 226 respondents, people who participated in purchases in large retail grocery stores (primarily hypermarkets), to conclude the factors influencing visual merchandising on impulsive consumer buying.

Results: The results of the regression analysis indicate that there is a statistically significant positive impact of secondary displays, price promotional labels, and in-store music on impulsive purchases, while the availability of prices over the Internet and weekly promotional catalogs have a negative impact on impulsive purchases.

Conclusions: This research provides clear instructions to grocery retailers, and their suppliers (manufacturers and distributors) who place their products in their stores about elements of visual merchandising that can significantly affect consumers' impulsive buying and generate additional revenue. Although retailers receive direct positive feedback, it is also of equal importance for manufacturers (manufacturing brands), as they often participate in in-store visual merchandising processes.

Key words: grocery retailing, visual merchandising, impulsive buying, secondary exhibitions, price promotional labels, store atmosphere

INTRODUCTION

While consumer habits are changing, physical stores are still the dominant buying channel, especially in grocery retailing (predominantly food products) retailing. With fierce competition and the need for adaptability to new consumer demand expectations (e.g., omnichannel consumers), the physical store remains the place where retailers have the strongest influence on consumer buying, especially on their impulsive part. In that sense, retailers primarily use visual merchandising and store environment tools to increase impulsive buying. According to Berman and Evans [2018], visual merchandising includes the in-store

layout, the type of fixtures, the display windows of the store and aisle width, but also the way in which the merchandise is visually organized, the types of lighting, in-store signage, the choice of background music, the paint on the walls and graphics, the type of flooring, and the use of videos on in-store screens. All of these factors are designed to increase consumers' stay in the store and consequently the overall spending in the store. Due to the vast choice of different visual merchandising tools and limited budget, on the other hand, retailers need to be aware of the effectiveness of each of them and understand the principles of its use in the store.

The aim of this paper is to investigate which factors in the store environment (and especially

visual merchandising) are successful in encouraging impulsive consumer buying. Therefore, two research questions were stated.

RQ1: Are all visual merchandising tools statistically influencing impulsive consumer buying in grocery stores?

RQ2: Which visual merchandising tools influence impulsive consumer buying positively and which negatively in grocery stores?

The paper contains an extensive literature review on the elements included in the model, namely *impulsive buying* as the dependent variable and *store layout, store design and cleanliness, regular promotional signage, in-store product displays, in-store price promotional labels, out-of-store price promotions, in-store colours, in-store music, and store employees* as independent variables. Furthermore, the research methodology was given, followed by the results, discussion, and conclusion.

LITERATURE REVIEW

Beatty and Ferrel [1998] usually associate **impulsive buying** with a feeling of pleasure, excitement, or a strong desire. Bayley and Nancarrow [1998] describe impulsive buying as a sudden but appealing, hedonistically complex purchase in which the speed of the decision-making process precludes a deliberate intention to consider alternative information and choices. Pirion [1991] states that the phenomenon of impulsive buying includes four criteria: impulsive buying is always unplanned, and such an instinctive decision is always made "on the spot", arises from a reaction to a stimulus, and involves a cognitive and/or emotional reaction. Therefore, it can expect that in-store elements, including visual merchandising, are designed to enhance impulsive buying. Including all possible elements of visual merchandising in this paper would require a much more theoretical background and a larger research sample. Therefore, some of the major chosen elements of visual merchandising that create a specific store-buying atmosphere will be analysed below. Gelsomino [2018] highlights several significant factors in merchandising within the store that further influence the emphasis on customer

desire and the transformation of the "browser" into a customer. He includes the store's front identity and first impressions, the store's layout, and promotional activities among the more important aspects.

Store layout refers to the way departments and aisles are organized in a store, with the basic goal of gaining customers, retaining customers, and promoting sales [Davies and Tilley 2004]. According to the American Marketing Association [2018], store layout or arrangement of departments or groupings of merchandise has to be organized to provide for ease of customer movement through the store and to provide maximum exposure and attractive display of merchandise. Previous research has recorded different outcomes. A significant positive correlation between layout and impulsive buying was found by Saad et al. [2015], while Nishanov et al. [2016] did not find a positive relationship between layout and impulsive buying.

Store design and cleanliness should make consumers feel comfortable in the store. Cleanliness of the sales area can be considered one of the most important elements of the store's appearance. According to Yun and Good [2007], store cleanliness creates an impression of luxury that attracts customers, contributes to a cozy atmosphere and keeps customers in the store longer. Bell and Ternus [2002] argue that lighting is a key driver of impulsive buying behaviour. It creates an efficient atmosphere, makes products more attractive, and encourages customers to buy more. Lighting attracts customers within the store and influences the creation of perceptions of the product and/or store value by customers [Bell and Ternus 2012].

Regular promotional signage from brands and regular offers have the role of enhancing the recognition of products among many other products at the point of sale, improving communication with customers, and also the visual appearance that attracts the attention of consumers. The role of promotional labels is to highlight certain products within the store, with an emphasis on creating a visual impression of the store [Štulec and Petljak 2016]. With the help of promotional labels, Mehta et al. [2013] claim that customers can buy the product fully informed without the help of sales staff. In the

retail industry, promotional labels are aimed at stock-up shoppers (the ones who spend more time in the store), and less at customers who aim to make a purchase as quickly as possible [Sorensen 2016]. Many previous research indicate the influence of promotional labels in the store on the purchase decision and impulsive buying [Anić and Radas 2007, Sarma 2014, Syahrivar 2016, Pawar et al. 2016]. On the other hand, the results of research by Hubrechts and Kokturk [2012] indicate that, despite the correlation, promotional labels in the store do not affect impulsive buying.

In-store product displays have become a powerful tool to attract consumers' attention in the store. Their cost is usually carried by manufacturers, since they represent additional exposure of products. They are used to maximize valuable retail space [Goworek and McGoldrick 2015] and to design and deliver offers that stand out [Grewal et al. 2017]. Their main role is to challenge and persuade the consumer to impulse buying [Ramandeep et al. 2015]. Previous research suggests that 50 % of total purchases made in grocery stores are influenced by product displays [Davies and Tilley's 2004]. Other researchers [Tumundo et al. 2022, Sarma 2014, Hubrechts and Kokturk 2012] have also found a significant positive influence of product displays on impulsive buying.

In-store price promotional labels are certainly considered one of the most common sales tools in contemporary retail. Lichtenstein et al. [1993] define consumer awareness of price promotions as 'the degree to which a consumer focuses solely on paying a low price'. However, price awareness varies from individual to individual, so different segments of consumers may differ on whether they find the price high or low [Sinha and Batra 1999]. Therefore, the influence of price promotional activities on impulsive buying depends largely on the personal characteristics of the consumer and the current situation in the environment [Zhou and Gu 2015]. Faced with a reduced price, the consumer reacts impulsively and his intention to buy increases significantly [Zhou and Wong 2004]. Although price has always been considered a significant factor in impulsive buying [Tendai et al. 2009], there are several different conclusions about the influence of price promotions. Using the eye-tracking method,

Huddleston et al. [2015] found that providing promotional labels with product information, but without the indicated price of the product, increases the probability of purchase compared to labels with the indicated price. At the same time, a positive relationship was established between customer attention to visual cues that show the price and the likelihood of purchasing these products. On the other hand, a negative relationship was found between attention to promoted information and the likelihood of purchasing that product. Weerathung and Pathmini [2015] recorded a high level of significant influence of tools of price promotional tools (price discounts, free samples, 1 + 1 free and loyalty program) on the consumers' impulsive purchases by consumers. The sales and price discounts had the strongest influence and Omid [2016] confirmed the same.

Out-of-store price promotions are very common to inform consumers about special prices. Thereby, various information channels are used, such as the Internet, promotional catalogues or TV ads. Voss and Seiders [2003] state that when an ad is based on price, it is primarily in the service of attracting consumers by temporary price promotions. Retailers are counting on the fact that most consumers will also buy other products during their visit to the store, but many consumers can expect to plan their shopping trip based on temporary low prices. That planning can lower the tendency to impulsive buying. In support of this, there is the development of specialized websites and applications that serve as a tool for consumers, making it easier for consumers to compare prices and buy at the lowest prices [Ziliani and Ieva 2015].

In-store colours play an important role in creating the atmosphere in the store. Colours stimulate sales, and Bellizi and Hite [1992] state that colour within the store plays a vital role in the process of impulsive buying behaviour and represents the first thing customers notice before entering the store. Babin et al. [2003] claim in their research that colours affect mood swings, perception, shopping time, and satisfaction. Therefore, colour is important in all areas of retail, especially visual merchandising, lighting, and display positioning [Bhalla and Anuraag 2010].

In-store music relaxes or excites customers, and therefore affects how customers shop in the store. Milliman [1982] in his research studied the influence of the tempo of background music in a store on sales volume. The research findings indicate that a slower pace is most often associated with high sales volume, while a faster pace is associated with lower sales volumes. Furthermore, louder, faster-paced music that does not match the consumer's musical taste will affect the feeling of spending significantly more time in the store than it really is [Berkhout 2016]. Yalch and Spangenberg [2000] researched the effects of familiar or unfamiliar music. They concluded that when the background music is less familiar to the consumers, the time spent in the store and research of the offer is longer, communication is better, and shopping satisfaction is higher. It is possible to conclude that music affects the emotions of consumers and their purchasing decisions depending on the tempo, choice of music, and volume. On the other hand, music also affects the efficiency of employees themselves. Berkhout [2016] indicated how music affects employee efficiency, i.e., how faster music leads to higher employee productivity.

The importance of **store employees** stems from the interactive effects [Gwinner and Bitner 2005] that result in customer service, thereby directly influencing the encouragement of purchase readiness and ultimately purchase decisions [Baker et al. 1992]. Research by Mattila and Wirtz [2008] indicates that employee accessibility, employee education, and training to be more customer-oriented during the most frequent customer visits will influence consumer impulsive behaviour. Mihić and Kursan [2010] concluded that the kindness and skill of sales personnel motivate customers to make an impulsive purchase, while direct assistance or support by sales staff in shopping can partially influence their impulsive buying behaviour. Saad and Metawie [2015] did not indicate a possible prediction of impulsive buying based on the consideration of the role of store employees. However, the findings of their research indicate that customers who develop positive interactive relationships with store employees express a higher level of a tendency toward impulsive buying and, therefore, a higher number of impulsively purchased products.

RESEARCH METHODOLOGY

The primary research was focused on supermarkets and hypermarkets, that is, large retail formats in the Croatian retail context. Using a highly structured questionnaire as a research instrument, both paper-based and online version through the Google Forms template, a convenient sample of 226 respondents was included. All respondents met the basic criterion: They are involved (main or occasional buyer) in purchasing for their household. To facilitate the completion of the questionnaire, the respondents had to nominate one retailer in whose store they buy most often and base their further responses on that retailer's store. Statistical software package IBM SPSS 23.0. was used to analyze the obtained data using the regression analysis method. Table 1 shows the main characteristics of the sample.

The model consists of impulsive buying as the dependent variable and store layout, store design and cleanliness, regular promotional signage, in-store product displays, in-store price promotional labels, out-of-store price promotions, in-store colours, in-store music, and store employees as independent variables. Variables were measured by scales consisting of statements presented in 5-point Likert scales. Commonly acceptable reliability, according to Nunnally [1978], is the value of Cronbach's Alpha (CA) above 0.7. All the constructs included in the model have CA higher than 0.7. The lowest reliability has the construct for store design and cleanliness (0.712). Reliability analysis and descriptive statistics of the constructs are shown in Table 2.

RESEARCH RESULTS

Regression analysis was conducted to investigate the explanation for impulsive buying through the existence of a statistically significant influence of key factors of visual merchandising on it. Table 3. shows the proportion of the variance in the (impulsive buying) dependent variable that is explained by the given model of visual merchandising elements. R Square of .271 means that this model explains 27.1 % of the variance in consumers' impulsive buying.

Table 1. Sample description

		N	%
Gender	Total	226	100
	Male	83	36,7
	Female	143	63,3
Age	Total	226	100
	18-24	86	38,1
	25-30	69	30,5
	31-40	34	15,0
	41-50	17	7,5
	51-60	13	5,8
Education	61-70	7	3,1
	Total	226	100
	Primary school	7	3,1
	High school	82	36,3
	Higher education	41	18,1
Employment status	Faculty	59	26,1
	Scientific masters or doctoral degree	37	16,4
	Total	226	100
	Student	80	35,4
	Employed	102	45,1
Members of household	Unemployed	35	15,5
	Retired	9	4,0
	Total	226	100
	1	9	4,0
	2	42	18,6
Household monthly income	3	66	29,2
	4	65	28,8
	5 and more	44	19,5
	Total	226	100
	not answered	1	0,4
	less than 400.00 €	24	10,6
	400.00 – 800.00 €	52	23,0
800.00 -1,200.00 €	64	28,3	
1,200.00-1,500.00 €	34	15,0	
1,500.00 -1,800.00 €	19	8,4	
1,800.00 € and more	32	14,2	

Source: own work.

Table 2. Reliability analysis and descriptive statistics of the constructs

Scale	N of items	Cronbach Alpha	Mean	Variance	Std. deviation	Scale source
Impulsive buying (IB)	6	0.833	15.66	26.562	5.154	Hubrechts and Kokturk (2012); Mehta and Chugan (2013)
Store layout (SL)	8	0.780	27.77	29.953	5.473	Hubrechts and Kokturk (2012); Henry (2014)
Store design and cleanliness (SDC)	4	0.712	13.73	9.238	3.039	Grewal and Baker (1994); Bouzaabia et al. (2013)
In-store product displays (IPD)	6	0.894	18.48	28.429	5.332	Hubrechts and Kokturk (2012); Henry (2014)
Regular promotional signage (RPS)	5	0.863	15.68	22.140	4.705	Hubrechts and Kokturk (2012)
In-store price promotional signage (IPP)	7	0.917	25.95	34.611	5.889	Hubrechts and Kokturk (2012); own
Out-of-store price promotion (OPP)	3	0.755	11.18	7.482	2.735	Hubrechts and Kokturk (2012); own
In-store colours (IC)	4	0.783	13.63	9.763	3.125	Henry (2014); Jamnani (2015)
In-store music (IM)	4	0.888	9.83	15.216	3.901	Henry (2014.), Jamnani (2015)
Employees staff (ES)	4	0.890	15.12	9.960	3.156	Baker et al. (1994); Ngobo and Coutelle (2014)

Source: authors' work

Table 3. Model summary

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,521 ^a	,271	,241	6,99161
a. Predictors: (Constant), Total_IC, Total_OPP, Total_ES, Total_RPS, Total_SL, Total_IM, Total_SDC, Total_IPD, Total_IPP				
b. Dependent Variable: IB				

Source: own work

The ANOVA results are shown in Table 4. Taking into account that Sig = .000, i.e. $p < 0.005$,

this indicates the statistical significance of the result in the model summary table.

Table 4. ANOVA

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3931,584	9	436,843	8,937	,000 ^b
	Residual	10558,651	216	48,883		
	Total	14490,235	225			
a. Dependent Variable: IB						
b. Predictors: (Constant), Total_IC, Total_OPP, Total_ES, Total_RPS, Total_SL, Total_IM, Total_SDC, Total_IPD, Total_IPP						

Source: own work

The following Table 5 shows which variable contributes to the prediction of the impulsive buying. The significance column

indicates that in-store product displays, in-store price promotion labels, out-of-store price promotions, and in-store music statistically significantly ($p < 0.05$) influence impulsive buying.

Table 5. Regression coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	24,353	3,290		7,403	,000
	Total_IPD	,362	,107	,275	3,367	,001
	Total_SL	,066	,111	,045	,592	,554
	Total_RPS	,023	,133	,013	,171	,864
	Total_IPP	,233	,104	,208	2,249	,026
	Total_OPP	-,470	,215	-,160	-2,184	,030
	Total_ES	-,059	,166	-,023	-,358	,721
	Total_IM	,447	,156	,217	2,859	,005
	Total_SDC	-,072	,210	-,027	-,346	,730
	Total_IC	-,026	,211	-,010	-,125	,900

Source: own work

While in-store product displays ($\beta= 0.275$), in-store price promotion labels ($\beta= 0.208$) and in-store music ($\beta= 0.217$) influence impulsive buying positively, out-of-store price promotions negatively influence impulsive buying ($\beta= - 0.160$). The obtained results are discussed in the following section.

DISCUSSION AND CONCLUSION

In times when online retailing gains considerable and rising attention, impulsive consumer buying is one of the last advantages of in-store business for retailers. Therefore, retailers invest considerable time and funds into promotional activities, especially merchandising, in their retail stores to increase impulsive buying. Although there are many directions to canalize in-store visual merchandising investments, contemporary retailers seek the right combination of investment in merchandising tools to get the best overall blend of atmosphere, incentives, and products displayed, and finally the highest return on investment. Previous research has shown differences when it comes to existing of the significant influence of certain merchandising variables on impulsive in-store buying, and there are no general conclusions. Our research has tested the most used retailing tools for increasing impulsive buying: store layout, store design and cleanliness, regular promotional signage, in-store product displays, in-store price promotional labels, out-of-store price promotions, in-store colours, in-store music, and store employees. Obviously, the influence of merchandising on impulsive buying in retail stores is a multidimensional phenomenon where some variables have positive and some negative influences. According to this research results, only product displays ($\beta= 0.275$), in-store price promotion labels ($\beta= 0.208$), and in-store music ($\beta= 0.217$) have a statistically significant positive influence on impulsive buying confirming previous research and determining the position of the merchandising tool in which it pays to invest more. These results provide answers to the first research question (RQ1). The second research question (RQ2) is explained below.

The strong influence of in-store product displays is expected and well known in previous

studies [Grewal et al. 2017, Davies and Tilley's 2004, Hubrechts and Kokturk 2012, Sarma 2014], and confirmed in this research as well. In such a situation, the displays of in-store products remain source of additional income for retailers, as many suppliers are willing to pay significantly additional funds. Their presence in space has inevitably benefits for product sales and hardly any product on the shelf positions can measure up to their ability to sell. Although product displays are very lucrative, retailers must avoid situations in which an additional display will be a physical obstacle in the process of browsing and purchasing, and be aware of a possible imbalance in the category caused by too many displays.

Due to the relatively high price elasticity of demand in grocery retail, our results likewise confirmed in-store price promotional labels as one more critical factor that positively influences impulsive buying. While faced with a huge assortment of various products in a certain product category, promotional price labels easily attract consumers' attention of consumers and increase the probability of unplanned purchases.

Earlier studies [Milliman 1982, Berkhout 2016, Yalch and Spangenberg 2000] were highlighting the role of in-store music in shopping behaviour, and this research has also proven that in-store music significantly positively influences impulsive buying in the store – both through the duration of stay and intensity of buying. It appears that in this area of merchandising, there are the largest opportunities for retailers' improvement when it comes to influencing impulsive buying.

Finally, the results indicate that consumers perceived out-of-store price promotions (prices through the Internet and weekly promotional catalogs) as the ones that negatively influence impulsive buying. In other words, if consumers are informed about price promotions outside the store, they think they will buy less impulsively and buy more focused manner. However, the fact that retailers so strongly on out-of-store promotions inevitably confirms a fact of high share impulsive buying of these consumers. Probably, the largest part of this impulsive buying is caused by in-store incentives, but out-of-store promotions are crucial for attracting

consumers to the store, and retailers know it. Considering that promotional activities are usually included in demand forecasting [Kmieciak and Zangana 2022], it would be useful for retailers to know the structure of those promotional activities, ie, the ratio of promotions attracting the consumers in stores and those that are incentives for impulsive buying.

It can be concluded that, in grocery retailing, price promotional labels are the strongest available merchandising tool to increase impulsive buying, while in-store product displays are the strongest off-shelf merchandising tool for increasing impulsive buying. At the same time, in-store music represents a somewhat neglected but proven effective area in attempting to increase impulsive buying through an improved store atmosphere.

The main limitations of the research arise from focusing solely on grocery stores and in a relatively narrow geographical area (Republic of Croatia). Therefore, future research should be geographically expanded and investigate the structural causes behind all variables of visual merchandising and its elements.

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Jelena Franjkovic ORCID ID: <https://orcid.org/0000-0001-7725-3098>
Josip Juraj Strossmayer University of Osijek, **Croatia**
e-mail: jelena.franjkovic@efos.hr

Marta Botkuljak ORCID ID: <https://orcid.org/0000-0002-9252-0606>
Josip Juraj Strossmayer University of Osijek, **Croatia**
e-mail: botkuljak.marta@gmail.com

Davor Dujak ORCID ID: <https://orcid.org/0000-0001-7725-3098>
Josip Juraj Strossmayer University of Osijek, **Croatia**
e-mail: ddujak@efos.hr