



# The role of positive emotional response in the relationship between store atmosphere, sales promotion, hedonic shopping motivation, and impulsive buying in Indonesia's largest department store

Nur Kholis\*, Muchammad Saifuddin†, Nur Aulia Syajida Arif

Department of Management, Faculty of Islamic Economics and Business, UIN Sunan Ampel Surabaya, Java Timur 60237, Indonesia

## Article Info

### Article history:

Received 13 June 2022

Revised 20 September 2022

Accepted 31 October 2022

Available online 15 September 2023

### Keywords:

hedonic shopping motivation,  
impulsive buying,  
positive emotional response,  
sales promotion,  
store atmosphere

## Abstract

Impulsive buying behavior has attracted many studies, yet there is an inconsistent result of factors determining impulse buying, particularly when consumers' environment is involved. This study investigates the effects of store atmosphere, sales promotion, and hedonic shopping motivation on impulse buying mediated by a positive emotional response. The sample of this study was 175 consumers of Indonesia's largest department store who have at least visited the store once. Data were collected using Google Forms online questionnaires and analyzed with the PLS-SEM method. The results show that sales promotion and hedonic shopping motivation directly affect the positive emotional response. Positive emotional response directly influences impulsive buying and significantly mediates the effects of sales promotion and hedonic shopping motivation on impulse buying. The store atmosphere did not affect the positive emotional responses of consumers and impulsive buying behavior. This study suggests the cruciality of positive emotional response in improving impulsive buying and, thus, such should not be ignored in consumer behavior studies. Practically, business practitioners should maintain consumers' positive emotions to gauge their impulse buying tendency, leading to improved sales.

© 2023 Kasetsart University.

## Introduction

Customers are more likely to make offline and online purchases without planning (Gawior et al., 2022; Jie et al., 2022; Wang et al., 2022). Unintentional purchases are often

defined as impulsive buying driven by internal and external inducements (Kimiagari & Asadi Malafe, 2021). Impulsive buying can suddenly happen when people enter a shopping mall or department store or change their purchases previously planned to do (Aragoncillo & Orus, 2018).

Despite being conceived as the same, there is a fundamental difference between unplanned and impulsive buying in that all impulsive buying is spontaneous, but not all unplanned buying is impulsive (Sohn & Ko, 2021). Impulsive buying is one form of purchase that does not involve any intention beforehand. It is usually

\* Corresponding author.

E-mail address: [nurkholis@uinsby.ac.id](mailto:nurkholis@uinsby.ac.id) (N. Kholis).

† Co-first authors.

E-mail address: [saifuddin@uinsby.ac.id](mailto:saifuddin@uinsby.ac.id) (M. Saifuddin).

based on irrational thinking and is prompted by feelings and emotions. What makes impulse buying “stands out” over the other forms of unplanned purchases is the urge and desire to purchase something, which makes it very relevant to what this research proposed. Recent data show that unintentional purchases accounted for about 40.0 to 80.0 percent (Rodrigues et al., 2021).

The increase in impulse buying behavior is related to changes in people’s shopping patterns, from fulfilling their daily basic and complimentary needs to seeking pleasure from buying a product. Such purchasing behavior is the fertile ground for marketers to increase sales significantly (The Economic Times, 2022; Xiao & Nicholson, 2011), even though it can negatively affect people psychologically and financially (Dittmar & Drury, 2000; Fenton-O’Creedy et al., 2018).

Impulse buying has been studied from several viewpoints (Mandolfo & Lamberti, 2021; Verplanken & Sato, 2011), including socio-demographics (Desai, 2018; Ugbomhe et al., 2021), environmental stimuli (Rasheed et al., 2017; Zhang et al., 2022), personal-psychological (Sun et al., 2021; Wang, X., et al., 2022), marketing strategies (Mandolfo et al., 2022).

However, these studies were conducted beyond Indonesia’s context. Most recent empirical studies in Indonesia include the relationships between positive emotion (Amalia et al., 2021; Setiawan & Sri Ardani, 2022), fashion involvement and sales promotion (Brabo et al., 2021; Padmasari & Widyastuti, 2022), hedonic shopping motivation (Ranasari & Fajrianthi, 2021; Widagdo & Roz, 2021), and shopping Lifestyle (Padmasari & Widyastuti, 2022; Sopiyan & Kusumadewi, 2020) with impulsive buying. These past studies, however, focused on direct effects and failed to address mediation analyses.

Therefore, this study investigates the in-store and psychological factors driving impulsive buying behavior in the Indonesian retail market. Specifically, it examines: (1) the direct effects of store atmosphere, sales promotion, hedonic shopping, and positive emotional response on impulsive buying; and (2) the mediating role of positive emotional response on the relationship between store atmosphere, sales promotion, and hedonic shopping motivation with impulsive buying behavior.

Using positive emotional response as the mediator is reasonable because if store atmosphere, sales promotion, and hedonic shopping motivation fail to trigger positive emotional reactions, they will not contribute to impulse buying behavior (Danish Habib & Qayyum, 2018; Kimiagari & Asadi Malafe, 2021; Ortiz Alvarado et al., 2020; Weinberg & Gottwald, 1982). Doing this analysis constitutes an original contribution to this study, as studies that use the positive emotional response as an intervening variable are,

to date, either inconclusive or scarce, thus extending theories of marketing literature and consumer behavior. Furthermore, understanding better the importance of the emotional state of consumers will help better formulate effective marketing strategies for business partitioners (Akram et al., 2018; Sofi & Nika, 2017).

---

## Literature Review

Impulsive buying involves unintentional, enjoyment-based, unthoughtful impact and compulsive-need purchasing behavior (Akram et al., 2018; Amos et al., 2014; Kimiagari & Asadi Malafe, 2021; Rook, 1987). It usually occurs as a combination of psychological drives and external stimuli. Trait activation theory (TAT) posits that the expression of individual traits is contingent upon situational signals encountered (Tett et al., 2021; Tett & Burnett, 2003; Zagenczyk et al., 2017). TAT application is expected in consumer behavior studies to investigate personality-situational relationships that predict behavioral outcomes (Flight et al., 2012; Lievens et al., 2006). This model of relationship explanation offers a theoretical framework for studying the correlates of impulsive buying behavior. Previous studies used diverse factors affecting impulsive buying; yet, they fall into personal including positive emotional response (Danish Habib & Qayyum, 2018) and hedonic motivation (Wang et al., 2022), and environmental perspectives, e.g., store ambiance (Setiawan & Sri Ardani, 2022), and promotional activities (Mandolfo et al., 2022; Zhang et al., 2022).

### Impulse Buying

Impulsive buying is commonly conceived as a form of consumer decision to buy a product suddenly and without prior intention to purchase the product or considering the consequences after buying the product, usually driven by a sudden emotional response when consumers are in the store (Rodrigues et al., 2021). An early study proposed seven dimensions of impulsive buying: spontaneity, strength and coercion, excitement and stimulation, synchronization, product animation, hedonic elements, and ignoring consequences (Rook, 1987). Verplanken & Herabadi (2001) formulated the rational (cognitive) and emotional (affective) dimensions of impulsive buying (Ozen & Engizek, 2014). The sensible component includes the consumers’ act of buying without prior planning to purchase and without any consideration. The affective dimension is related to the emotional consumer side and is part of strength and coercion, excitement and stimulation, synchronization, product animation, and hedonic elements.

### Store Atmosphere

The store atmosphere is the physical element of a retail setting that the firm can control to augment (or confine) employees and customer behaviors. A good store atmosphere can be observed from its exterior, interior, layout, and interior displays (Berman et al., 2018). The shop exterior includes the storefront, marquee, entrances, display window, size and high building, uniqueness, and the surroundings creating a solid image of the store. The interior includes various observable, sensed, and touchable aspects ranging from flooring, aroma, and paint to private facilities, price labels, and hygiene. The layout covers floor allocation consisting of the space for selling, merchandise, personal space, and customer space. A good store layout makes consumers feel at home and spend more money. Finally, the interior displays provide information to customers to influence the atmosphere of the shop environment, including, e.g., assortment displays, posters, and signs.

Previous studies consistently demonstrated the significant influence of store atmosphere on consumers' impulsive buying, indicated by impulsive purchases in the store (Arthur et al., 2020; Sindhu & Kloep, 2020). Furthermore, store atmosphere significantly affects positive emotion, and positive emotion mediates the impact of store atmosphere on impulsive buying (Aurellia, 2019).

H1 & H2: "Store atmosphere positively affects positive emotional response and impulsive buying."

### Sales Promotion

Sales promotion is a direct persuasion created by marketers to attract consumers to buy many products (Sumarwan & Tjiptono, 2018). Kotler et al. (2022) define sales promotion as a short-term incentive tool designed in such a way as to encourage consumers to buy more products. Sale promotions include: (1) product samples to try before buying; (2) coupons noting a discount; (3) price packs affixed to a product label; (4) direct price reductions; and (5) frequency programs—a frequent buy will cost less; (6) prizes based on winning; (7) cash awards for regular users; (8) free trials of a product; (9) guarantees promised for a defect; and (10) display and demonstration of purchase points.

Several studies found that sales promotions positively and significantly predict impulsive buying, particularly price discounts and the buy-one-get-one mechanism (Liu & Xie, 2020). Similarly, such promotion tools as discounts, coupons, lottery and game contests (Al Mutanafisa & Retnaningsih, 2021), gifts, free shipping, prize draw (Febrilia & Warokka, 2021), and promotion incentive information (Zhang et al., 2022) were found to contribute to the tendency of consumers to act impulsive buying. In addition, monetary-

immediate and non-monetary-immediate promotion types (Bandyopadhyay et al., 2021), cashback programs or bundling products, free vouchers, and promotions in special events also increase the likelihood of impulsive buying behavior (Padmasari & Widyastuti, 2022).

H3 & H4: "Sales promotion positively affects positive emotional response and impulsive buying."

### Hedonic Shopping Motivation

Hedonic shopping motivation may be defined as a consumer shopping desire to seek the fulfillment of pleasure rather than needs and to escape from problems (Arnold & Reynolds, 2012). Studies used different dimensions in determining a consumer's hedonic level. For example, Arnold and Reynolds (2003) developed six dimensions of hedonic shopping motivation: adventure shopping (getting enjoyment from shopping adventure), social shopping (pleasure from shopping with families or friends), gratification shopping (reduction-stress shopping), idea shopping (collecting new information about the latest products), role shopping (buying a product for a gift), and value shopping (buying at a low price item).

Hedonic shopping motivation significantly influenced impulsive buying (Akram et al., 2018). Furthermore, studies examining the effects of hedonic shopping motivation by its dimensions also found that they are correlated with impulsive buying (Ranasari & Fajrianthi, 2021). Furthermore, positive emotions significantly influenced impulsive purchases and mediated the effect of hedonic shopping motivation on impulsive buying (Puspita & Budiarti, 2016).

H5 & H6: "Hedonic shopping motivation positively influences positive emotional response and impulsive buying."

### Positive Emotional Response

Consumers' emotional states can drive them to perform impulsive purchases (Sun et al., 2021). Emotion is prompted by external stimuli (Tyng et al., 2017). Positive and negative emotions, such as joy and fear, can affect how consumers think, make purchase choices, feel after making decisions, what is remembered, and how to enjoy a specific experience (Sumarwan & Tjiptono, 2018). Laros and Steenkamp (2005) developed two dimensions of positive emotional response: satisfaction occurs when individuals meet their desires and feel calm accordingly, and happiness is obtained from the presence of support, full of hope, and not anxious or depressed.

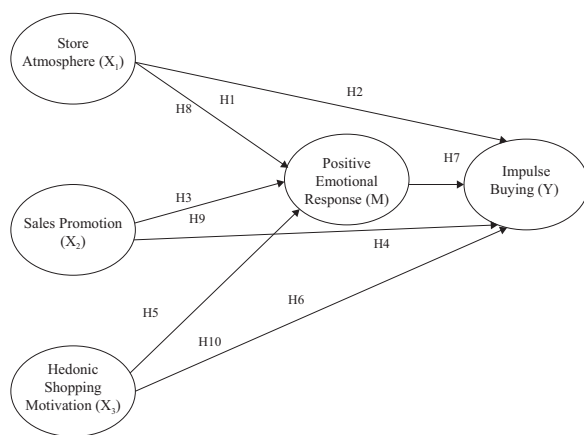
An earlier study reported an insignificant impact of positive emotion on impulsive purchases (Choirul & Artanti, 2019). However, later research found that positive

emotions directly contribute to consumers' impulse buying in various store types and modes (Azhari et al., 2020). Studies testing mediation found that positive emotions mediated the associations of store atmosphere (Setiawan & Sri Ardani, 2022), hedonic shopping (Rahadhini et al., 2020), sales promotion (Duong & Khuong, 2019), and visual merchandising (Listriyani & Wahyono, 2019) with impulse buying. However, the mediating role of positive emotion in the effect of fashion commitment on impulsive purchase was insignificant (Choirul & Artanti, 2019).

*H7: "Positive emotional response positively and significantly affects impulse buying."*

*H8, H9 & H10: "Positive emotional response mediates the effects of store atmosphere, sales promotion, and hedonic shopping motivation on impulsive buying."*

Figure 1 presents a conceptual framework for this study.



**Figure 1** Research conceptual framework

## Methodology

### Study Design

Adopting an explanatory design (Creswell, 2018), this study examined the effects of store atmosphere, sales promotion, and hedonic shopping motivation on impulse buying mediated by the positive emotional response of consumers by testing several hypotheses. The consumers of Matahari Department Store Royal Plaza Surabaya, Indonesia, participated in this study. With 139 stores across Indonesia, Matahari has become the largest Indonesian retail platform specializing in retailing apparel, accessories, footwear, and beauty products. Despite the Omicron peak, Matahari reported gross sales of IDR. 2.4 trillion for the first quarter of 2022, an increase of 16 percent over the same period in 2021 (Olavia, 2022).

### Participants

The population of this study is all visitors to Matahari Department Store. The number of samples needed in this study was determined according to the analysis method used. In the structural equation model method, the required minimum sample is five times the number of indicators (Ferdinand, 2014). This study has 35 markers for five latent variables; thus, a minimum of 175 respondents is needed as the sample. This number complies with the Maximum Likelihood Estimation (MLE) approach, which suggests that the expected representative sample should be around 100–200 (Hair et al., 2010). Furthermore, this number of respondents is considered sufficient in the partial least squares SEM (PLS-SEM) method for statistical power (Hair et al., 2021).

Table 1 depicts the summary of the respondent's background. Most respondents were women (76%) and men (24%); those aged 17–21 years were 54 percent and 22–26 years 36 percent; most of them were college students (69%), followed by private employees (15%); those earned less than IDR1 million represented 59 percent and IDR1 to 2 million 22 percent, and they purchased from the store two times (47%), more than three times 38 percent, and three times 15 percent.

**Table 1** Characteristics of respondents

(N = 175)			
	Classification	Frequency	Percentage
Gender	Male	42	24
	Female	133	76
	Total	175	100
Age (years)	17–21	95	54
	22–26	63	36
	27–31	5	3
	32–36	1	1
	>36	11	6
	Total	175	100
Occupation	College student	120	68
	Entrepreneur	3	2
	Government employees	1	1
	Private employees	26	15
	Entrepreneur	6	3
	Housewife	7	4
	Other	12	7
	Total	175	100
Income	< IDR 1 million	104	59
	IDR 1 to 2 million	38	22
	IDR 2 to 3 million	15	8
	IDR 3 to 4 million	10	6
	>IDR 4 million	8	5
	Total	175	100
Purchases made	2 time	82	47
	3 time	26	15
	> 3 time	67	38
	Total	175	100

### Data Collection

Data were collected using semi-structured questionnaires distributed online to comply with health protocols to suppress the Covid-19 transmission and efficiency (Andrade, 2020). The Google-Formed questionnaires were distributed through social media, such as WhatsApp, Telegram, and Instagram. A filtering question was created to ensure the respondents met the requirement to anticipate response bias. The screening statement was whether the respondents had made two purchases at the outlet and had a minimum age of 17. Answering 'no' to these questions stopped them from filling in other questions/statements in the questionnaires.

### Variable Measurements

The measurement of impulsive buying was adapted from cognitive and affective dimensions developed by Verplanken & Herabadi (2001), which assess impulsive buying tendency. The scale adaptation should be attempted due to the current study being conducted in an environment different from that in which the original scale was developed (Trimble & Vaughn, 2013; Vijver & Leung, 1997). Store atmosphere was measured using four dimensions: exterior, interior, store layout, and interior displays (Berman et al., 2018). Five dimensions of sales promotion were included: product samples, coupons, cash returns, special prices, and frequency programs (Kotler et al., 2022). Hedonic shopping motivations include adventure, social, gratification, idea, role, and value shopping (Arnold & Reynolds, 2003). Positive emotional response dimensions were satisfaction and happiness (Laros & Steenkamp, 2005). Each dimension of each variable has at least one indicator; the total was 35 items. The measurement scale in this study uses a 5-point Likert scale: 1 = strongly disagree, 2 = disagree, 3 = somewhat agree, 4 = agree, and 5 = strongly agree. A 5-point scale would result in better validity, reliability, discriminant strength, and stability (Preston & Colman, 2000).

### Data Analysis

This study uses partial least squares structural equation modeling (PLS-SEM) because the sample is relatively small, yet it seeks to confirm the quality of measurement models and examine the causal-predictive relationships of variables (Chin et al., 2020; Hair et al., 2020). Specifically, PLS-SEM was used to evaluate the measurement model (outer model), the evaluation of

the structural model (inner model), and hypothesis testing. The construct validity test was measured on convergent validity based on the value loading and Average Variance Extracted (AVE) > 0.5, and discriminant validity based on the square root of AVE being > the value correlations between constructs. A reliability test of Cronbach's Alpha > 0.7 was used (Supriyanto & Maharani, 2012).

The structural model (inner model) was evaluated against a coefficient determination or goodness of fit. R-square ( $R^2$ ) determines parameter estimate influences of exogenous on endogenous variables, F-square ( $F^2$ ) determines effect size (0.02 = small; 0.15 = moderate, and 0.35 = large) (Hair et al., 2020), and Q-square ( $Q^2$ ) determines the model's predictive relevance (Ghozali & Latan, 2014), where its value should be > 0 and vice versa (Supriyanto & Maharani, 2012). The  $p$  value < .05 was used (Narimawati et al., 2020) as the base for accepting hypotheses.

## Results and Discussion

### Measurement Model Analysis

Table 2 shows the final results of the analysis after eliminating some variables due to loading values below 0.6. (Impulse buying = Item 9; Store atmosphere = Items 1, 2, 3, 6, 7, 8, 9, 10, and 12; and Hedonic shopping motivation = Item 6). The loading values of all indicators measuring variables are > 0.6 and AVE > 0.5. Thus, the items used in this study converged on the same latent construct. Furthermore, Cronbach's Alpha and Composite Reliability (CR) for all variables are > 0.7, suggesting that all variables used have adequate reliability and high internal consistency. Furthermore, Table 3 shows that the AVE root values of all variables are > the correlation values among other constructs. Thus, all constructs are declared valid and have met the criteria for discriminant validity.

### Structural Model Analysis (Inner Model)

Table 4 indicates that the  $R^2$  value of positive emotional response is 0.575, meaning that store atmosphere, sales promotion, and hedonic shopping motivation influence 57.5 percent of positive emotional responses. Furthermore, the R-square value of impulse buying is 0.394, meaning that store atmosphere, sales promotion, and hedonic shopping motivation influence 39.4 percent of impulse buying.



**Table 2** Convergent validity and composite reliability

Construct	Item	Loadings	AVE	Cronbach's Alpha	Composite Reliability
Impulsive Buying	IB1	0.700	0.518	0.870	0.896
	IB2	0.690			
	IB3	0.707			
	IB4	0.685			
	IB5	0.718			
	IB6	0.696			
	IB7	0.770			
	IB8	0.784			
Store Atmosphere	SA4	0.652	0.528	0.851	0.886
	SA5	0.700			
	SA10	0.701			
	SA11	0.740			
	SA13	0.783			
	SA14	0.683			
	SA15	0.812			
Sales Promotion	SP1	0.755	0.613	0.843	0.888
	SP2	0.820			
	SP3	0.834			
	SP4	0.746			
	SP5	0.756			
Hedonic Shopping Motivation	HSM1	0.780	0.590	0.823	0.877
	HSM2	0.815			
	HSM3	0.827			
	HSM4	0.789			
	HSM5	0.610			
Positive Emotional Response	PER1	0.781	0.653	0.867	0.904
	PER2	0.846			
	PER3	0.781			
	PER4	0.781			
	PER5	0.847			

**Table 3** Discriminant validity test

Construct	(1)	(2)	(3)	(4)	(5)
(1) Impulsive buying	0.720*				
(2) Store atmosphere	0.436	0.727*			
(3) Sales promotion	0.690	0.411	0.783*		
(4) Hedonic shopping motivation	0.583	0.516	0.526	0.768*	
(5) Positive emotional response	0.602	0.616	0.688	0.608	0.808*

*Note:* \*AVE root values.

**Table 4** R-square ( $R^2$ ), R-square test ( $Q^2$ ), and F-square tests ( $F^2$ )

Construct	$R^2$	$Q^2$	$F^2$			
			(M)	Effect	(Y)	Effect
Store atmosphere (X1)	-	-	0.020	Small	0.003	Small
Sales promotion (X2)	-	-	0.095	Small	0.000	Small
Hedonic shopping motivation (X3)	-	-	0.319	Large	0.027	Small
Positive emotional response (M)	0.575	0.742	-	-	0.138	Moderate
Impulsive buying (Y)	0.394	-	-	-	-	-

*Note:* Q-value manual calculation:  $Q2\ 1 - (1-R^2_1) (1-R^2_2) = 1 - (1-0.575) (1-0.394) = 1 - (0.425) (0.606) = 1 - 0.257 = 0.742$ .

The *F*-square tests show that the influence of hedonic shopping motivation on positive emotional response is substantial (0.319), while that of store atmosphere and sales promotion is small. In addition, the effects of store atmosphere, sales promotion, and hedonic shopping motivation on impulsive buying are minor, while the impact of positive

emotional response on impulsive buying is moderate (0.128). Finally, the Q-square calculation obtained a score of 0.742, suggesting that the model has predictive relevance at 74.2 percent for the mediation of positive emotional response to the associations of store atmosphere, sales promotion, and hedonic shopping motivation with impulsive buying.

## Results of Hypothesis Testing

Table 5 shows that five hypotheses were accepted. First, sales promotion directly and significantly affects positive emotional response (H3); the more promotion is conducted, the more likely to increase the positive emotional response of consumers to the products displayed ( $t = 4.092, p = .000$ ). This finding supports the previous study, which demonstrated a significant influence of sales promotion on positive emotions (Brabo et al., 2021). Increasing sales promotion activities such as offering discounts and product samples, vouchers, and cashback will lead to a positive response from consumers to visit the outlet. This positive relationship may be related to most respondents being university students and women, presumably very enthusiastic when encountering a discounted prize on several products. Indeed many women consumers seek gratifications from a shop, including price discounts (Wang et al., 2022).

Second, hedonic shopping motivation directly and significantly influences positive emotional response (H5); people with high hedonic shopping motivation will likely have a positive emotional reaction to visiting the outlet ( $t = 6.440, p = .000$ ), supporting a previous study (Puspita & Budiarti, 2016). People meet their psychological needs by visiting a store, such as pleasure and entertainment. Notably, most of the respondents are women, indicating they have high hedonic shopping motivation (Tarka et al., 2022); thus, they spend their free time visiting fashion outlets for pleasure, shopping, or both.

Third, positive emotional response directly and significantly affects impulse buying (H7), supporting previous findings (e.g., Azhari et al., 2020; Brabo et al., 2021). People with high positive emotional responses to visiting a store are likely to have high impulse buying behavior ( $t = 4.195, p = .000$ ). Before buying products, most consumers will prioritize their mood rather than

consider the price and perceived post-purchase (Sumarwan & Tjiptono, 2018). Spending much time in the store will generate a positive attitude among consumers, making them buy a product outside the planned list or a product they did not think of before. This occurrence may also be connected with most respondents being women who intend to go to the mall to enjoy the store ambiance, buy goods (Olonade et al., 2021), and shop longer (Mihic et al., 2018), leading them to purchase things unintentionally.

Fourth, a positive emotional response mediates the influence of sales promotion on impulsive buying (H9); the high and more variations of sales promotion activities conducted by the store increase positive emotional response from consumers; this, in turn, positively increases the consumers' impulse buying behavior ( $t = 2.896, p = .000$ ). This finding supports previous studies (Duong & Khuong, 2019; Listriyani & Wahyono, 2019). In this case, a complementary partial mediation occurs (Ramayah et al., 2018). Because most respondents in this study are women who tend to look for price discounts (Wang et al., 2022), this heightens their tendency to visit the store more, leading to a high incidence of unplanned purchases.

Fifth, a positive emotional response mediates the impact of hedonic shopping motivation on impulsive buying (H10); high hedonic shopping motivation makes consumers have a high positive emotional response; this, in turn, positively increases the consumers' impulse buying behavior ( $t = 3.576, p = .000$ ). In this case, a complementary partial mediation occurs in these two mediation effects.

This finding supports previous studies (e.g., Rahadhini et al., 2020). The hedonic shopping motivation is more likely to be experienced by women (76% of our samples) (Tarka et al., 2022) and thus increases the likelihood of spending a long time shopping (Mihic et al., 2018) to enjoy the store ambiance and buying good, particularly fashion products (Olonade et al., 2021), then increase the

**Table 5** Path coefficient of direct and indirect effects

Hypotheses	Path	O	M	SD	t	p	Decision
H1	X1→M	0.137	0.139	0.075	1.827	.068	Rejected
H2	X1→Y	0.061	0.061	0.090	0.672	.502	Rejected
H3	X2→M	0.283	0.286	0.069	4.092	.000	Accepted
H4	X2→Y	0.000	0.001	0.094	0.005	.996	Rejected
H5	X3→M	0.462	0.463	0.072	6.440	.000	Accepted
H6	X3→Y	0.185	0.191	0.111	1.674	.094	Rejected
H7	M→Y	0.444	0.446	0.106	4.195	.000	Accepted
H8	X1→M→Y	0.061	0.062	0.038	1.589	.112	Rejected
H9	X2→M→Y	0.126	0.128	0.043	2.896	.004	Accepted
H10	X3→M→Y	0.205	0.206	0.057	3.576	.000	Accepted

Note: O = Original sample; M = Sample Mean; the t-value of accepted hypotheses is  $> 1.96$ ; X1 = Store atmosphere, X2 = Sales promotion, X3 = Hedonic shopping motivation, M = Positive emotional response, dan Y = Impulsive buying.

occurrence of unintentional purchases. A complete mediation seems apparent in this relationship process (Ramayah et al., 2018). Thus, even though consumers do not have hedonic shopping motivation, they might turn into impulsive purchase behavior due to the rise of positive emotional responses.

## Conclusion and Recommendation

This study analyzed factors contributing to impulsive buying using the in-store environment and psychological factors. The study results contribute to factors indirectly influencing impulsive buying behavior among fashion retail stores. The first contribution is that promotion strategies such as providing discounts, product samples, vouchers, and cashback enhance consumers' positive emotions by attending the store for a long time to fulfill their need for enjoyment and then purchasing goods unintentionally. The promotions are the initial stage for the fashion industry to attract consumers to visit the store for different purposes, including pleasure. Thus, it is not surprising that retailers invest considerable money to perform a variety of promotions aimed at gauging product sales.

The second contribution is that people with high hedonic shopping motivation tend to have strong positive emotions to visit the store to fulfill their expectations for enjoyment and pleasure and then increase their unintentional purchases. Even though hedonic shopping motivation may be difficult to control, the industry can design the store as a pleasant place for visitors to spend a long time, as this will lead to unplanned purchases. This study concludes that maintaining a positive emotional response of consumers seems critical for retail businesses as it can bridge other drives that increase impulse buying behavior, particularly in fashion retailers where women are the majority of visitors.

This current study offers practical implications for the retail industry. Consumers' positive emotions are indicated by their feeling of enjoyment and happiness when they visit a store, which drives them to purchase. Thus, making consumers' experiences joyous is essential for increasing buying outcomes. Some strategy to this is that the store provides better space, sufficient momentarily sitting for them or shopping acquaintances while queuing for a product or payment. In addition, the store can maximize sales promotion offline and online through social media intermediaries. The online sales promotion for informing discounts, vouchers, and product samples would give consumers sufficient time to think about purchasing certain products before visiting the store, leading them to purchase in high volumes.

## Conflict of Interest

The authors declare that there is no conflict of interest.

## References

- Akram, U., Hui, P., Khan, M., Yan, C., & Akram, Z. (2018). Factors affecting online impulse buying: Evidence from Chinese social commerce environment. *Sustainability*, 10(2), 352. <https://doi.org/10.3390/su10020352>
- Al Mutanafisa, T. & Retnaningsih. (2021). The effect of sales promotion and knowledge on impulsive buying of online platform consumers: The effect of sales promotion and knowledge on impulsive buying of online platform consumers. *Journal of Consumer Sciences*, 6(1), 77–91. <https://doi.org/10.29244/jcs.6.1.77-91>
- Amalia, O. N., Marsudi, M., & Andharini, S. N. (2021). The effect of store atmosphere on impulse buying mediating positive emotion: Case study of guardian's customers at Olympic Garden Mall). *Jurnal Manajemen Bisnis Dan Kewirausahaan (JAMANIKA)*, 1(1), 19–23. <https://doi.org/10.22219/jamanika.v1i1.16028>
- Amos, C., Holmes, G. R., & Keneson, W. C. (2014). A meta-analysis of consumer impulse buying. *Journal of Retailing and Consumer Services*, 21(2), 86–97. <https://doi.org/10.1016/j.jretconser.2013.11.004>
- Andrade, C. (2020). The limitations of online surveys. *Indian Journal of Psychological Medicine*, 42(6), 575–576. <https://doi.org/10.1177/0253717620957496>
- Aragoncillo, L., & Orus, C. (2018). Impulse buying behaviour: An online-offline comparative and the impact of social media. *Spanish Journal of Marketing - ESIC*, 22(1), 42–62. <https://doi.org/10.1108/SJME-03-2018-007>
- Arnold, M. J., & Reynolds, K. E. (2003). Hedonic shopping motivations. *Journal of Retailing*, 79(2), 77–95. [https://doi.org/10.1016/S0022-4359\(03\)00007-1](https://doi.org/10.1016/S0022-4359(03)00007-1)
- Arnold, M. J., & Reynolds, K. E. (2012). Approach and avoidance motivation: Investigating hedonic consumption in a retail setting. *Journal of Retailing*, 88(3), 399–411. <https://doi.org/10.1016/j.jretai.2011.12.004>
- Arthur, A., Owusu, I., & Boateng, E. D. (2020). Determinants of consumer impulsive purchasing behaviour in medium-large shopping malls in Ghana. *Open Journal of Business and Management*, 8(2), 379–395. <https://doi.org/10.4236/ojbm.2020.82024>
- Aurellia, D. P. (2019). Pengaruh Persepsi Konsumen Pada Store Atmosphere Terhadap Impulse Buying Melalui Shopping Emotion Pleasure. *EXERO Journal of Research in Business and Economics*, 2(1), 57–79. <https://doi.org/10.24071/exero.v2i1.2111>
- Azhari, G. F., Nugrahawati, E. N., & Dwarawati, D. (2020). Hubungan Positive Emotion dengan Online Impulsive Buying pada Mahasiswa Universitas Islam Bandung. *Prosiding Psikologi*, 6(2), 776–781. <https://doi.org/10.29313/v6i2.24424>
- Bandyopadhyay, N., Sivakumaran, B., Patro, S., & Kumar, R. S. (2021). Immediate or delayed! Whether various types of consumer sales promotions drive impulse buying?: An empirical investigation. *Journal of Retailing and Consumer Services*, 61, 102532. <https://doi.org/10.1016/j.jretconser.2021.102532>
- Berman, B., Evans, J. R., & Chatterjee, P. (2018). *Retail management: A strategic approach* (13th ed.). Pearson.
- Brabo, N. A., Sari, N. E., Iswati, H., & Meidiyustiani, R. (2021). The influence of price, promotion and positive emotions on online impulse buying with hedonic shopping motivation as an intervening



- variable (Study: Women fashion product in Indonesia). *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(4), 11358–11368. <https://doi.org/10.33258/birci.v4i4.3199>
- Chin, W., Cheah, J.-H., Liu, Y., Ting, H., Lim, X.-J., & Cham, T. H. (2020). Demystifying the role of causal-predictive modeling using partial least squares structural equation modeling in information systems research. *Industrial Management & Data Systems*, 120(12), 2161–2209. <https://doi.org/10.1108/IMDS-10-2019-0529>
- Choirul, A., & Artanti, Y. (2019). Millennial's impulsive buying behavior: Does positive emotion mediate? *Journal of Economics, Business, & Accountancy Ventura*, 22(2), 223–236. <https://doi.org/10.14414/jebav.v22i2.1738>
- Creswell, J. W. (2018). Research design: Qualitative, quantitative, and mixed methods approaches. Sage Publication.
- Danish Habib, M., & Qayyum, A. (2018). Cognitive emotion theory and emotion-action tendency in online impulsive buying behavior. *Journal of Management Sciences*, 5(1), 86–99. <https://doi.org/10.20547/jms.2014.1805105>
- Desai, A. (2018). Impulse buying – demographic aspect. *Journal of Management Research and Analysis*, 5(3), 236–238. <https://doi.org/10.18231/2394-2770.2018.0037>
- Dittmar, H., & Drury, J. (2000). Self-image – is it in the bag? A qualitative comparison between “ordinary” and “excessive” consumers. *Journal of Economic Psychology*, 21(2), 109–142. [https://doi.org/10.1016/S0167-4870\(99\)00039-2](https://doi.org/10.1016/S0167-4870(99)00039-2)
- Duong, P. L., & Khuong, M. N. (2019). The effect of in-store marketing on tourists' positive emotion and impulse buying behavior – An empirical study in Ho Chi Minh City, Vietnam. *International Journal of Trade, Economics and Finance*, 10(5), 119–125. <https://doi.org/10.18178/ijtef.2019.10.5.648>
- Febrilia, I., & Warokka, A. (2021). Consumer traits and situational factors: Exploring the consumer's online impulse buying in the pandemic time. *Social Sciences & Humanities Open*, 4(1), 100182. <https://doi.org/10.1016/j.ssaho.2021.100182>
- Fenton-O'Creevy, M., Dibb, S., & Furnham, A. (2018). Antecedents and consequences of chronic impulsive buying: Can impulsive buying be understood as dysfunctional self-regulation? *Psychology & Marketing*, 35(3), 175–188. <https://doi.org/10.1002/mar.21078>
- Ferdinand, A. T. (2014). Metode Penelitian Manajemen, Pedoman Untuk Penelitian Skripsi, Tesis, dan Disertasi Ilmu Manajemen. Badan Penerbit Universitas Diponegoro. [in Indonesian]
- Flight, R. L., Rountree, M. M., & Beatty, S. E. (2012). Feeling the urge: Affect in impulsive and compulsive buying. *Journal of Marketing Theory and Practice*, 20(4), 453–466. <https://doi.org/10.2753/MTP1069-6679200407>
- Gawior, B., Polasik, M., & del Olmo, J. L. (2022). Credit card use, hedonic motivations, and impulse buying behavior in fast fashion physical stores during COVID-19: The sustainability paradox. *Sustainability*, 14(7), 4133. <https://doi.org/10.3390/su14074133>
- Ghozali, I., & Latan, H. (2014). Partial least squares: Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0 Untuk Penelitian Empiris. Badan Penerbit Universitas Diponegoro. [in Indonesian]
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis* (7th ed). Prentice Hall.
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109, 101–110. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). An introduction to structural equation modeling. In *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R* (pp. 1–29). Springer, Cham. [https://link.springer.com/chapter/10.1007/978-3-030-80519-7\\_1](https://link.springer.com/chapter/10.1007/978-3-030-80519-7_1)
- Jie, W., Poulouva, P., Haider, S. A., & Sham, R. B. (2022). Impact of internet usage on consumer impulsive buying behavior of agriculture products: Moderating role of personality traits and emotional intelligence. *Frontiers in Psychology*, 13, 951103. <https://doi.org/10.3389/fpsyg.2022.951103>
- Kimiagari, S., & Asadi Malafe, N. S. (2021). The role of cognitive and affective responses in the relationship between internal and external stimuli on online impulse buying behavior. *Journal of Retailing and Consumer Services*, 61, 102567. <https://doi.org/10.1016/j.jretconser.2021.102567>
- Kotler, P., Keller, K. L., & Chernev, A. (2022). *Marketing management* (16th ed.). Pearson Education.
- Laros, F. J. M., & Steenkamp, J.-B. E. M. (2005). Emotions in consumer behavior: A hierarchical approach. *Journal of Business Research*, 58(10), 1437–1445. <https://doi.org/10.1016/j.jbusres.2003.09.013>
- Lievens, F., Chasteen, C. S., Day, E. A., & Christiansen, N. D. (2006). Large-scale investigation of the role of trait activation theory for understanding assessment center convergent and discriminant validity. *Journal of Applied Psychology*, 91(2), 247–258. <https://doi.org/10.1037/0021-9010.91.2.247>
- Listriyani, L., & Wahyono, W. (2019). The role of positive emotion in increasing impulse buying. *Management Analysis Journal*, 8(3), 312–320. <https://doi.org/10.15294/maj.v9i3.34265>
- Liu, D.-N., & Xie, J.-A. (2020). Effect of sales promotion on impulse buying behaviours of generation Y consumers in omni-channel retail contexts. *Archives of Business Research*, 8(11), 258–270. <https://doi.org/10.14738/abr.811.9224>
- Mandolfo, M., Bettiga, D., Lamberti, L., & Noci, G. (2022). Influence of sales promotion on impulse buying: A dual process approach. *Journal of Promotion Management*, 1–23. <https://doi.org/10.1080/10496491.2022.2060415>
- Mandolfo, M., & Lamberti, L. (2021). Past, present, and future of impulse buying research methods: A systematic literature review. *Frontiers in Psychology*, 12, 687404. <https://doi.org/10.3389/fpsyg.2021.687404>
- Mihic, M., Anic, I.-D., & Kursan Milakovic, I. (2018). Time spent shopping and consumer clothing purchasing behaviour. *Ekonomski Pregled*, 69(2), 89–105. <https://doi.org/10.32910/ep.69.2.1>
- Narimawati, U., Sarwono, J., Afandi, A., & Priadana, S. (2020). *Ragam Analisis dalam Metode Penelitian untuk Penulisan Skripsi, Tesis, Penerbit Andi*. [in Indonesian]
- Olavia, L. (2022). *Matahari (LPPF) Raup Penjualan Rp 2,4 Triliun, Naik 16% di Tengah Puncak Omicron Februari*. Investor.id. <https://investor.id/market-and-corporate/292138/matahari-lppf-raup-penjualan-rp-24-triliun-naik-16-di-tengah-puncak-omicron-februari>
- Olonade, O. Y., Busari, D. A., Idowu, B. O., Imhonopi, D., George, T. O., & Adetunde, C. O. (2021). Gender differences in lifestyles and perception of megamall patrons in Ibadan, Nigeria. *Cogent Social Sciences*, 7(1), 1954324. <https://doi.org/10.1080/23311886.2021.1954324>
- Ortiz Alvarado, N. B., Rodríguez Ontiveros, M., & Quintanilla Domínguez, C. (2020). Exploring emotional well-being in facebook as a driver of impulsive buying: A cross-cultural approach. *Journal of International Consumer Marketing*, 32(5), 400–415. <https://doi.org/10.1080/08961530.2020.1722979>
- Ozen, H., & Engizek, N. (2014). Shopping online without thinking: Being emotional or rational? *Asia Pacific Journal of Marketing and Logistics*, 26(1), 78–93. <https://doi.org/10.1108/APJML-06-2013-0066>
- Padmasari, D., & Widyastuti, W. (2022). Influence of fashion involvement, shopping lifestyle, sales promotion on impulse buying on users of Shopee. *Jurnal Ilmu Manajemen*, 10(1), 123–135. <https://doi.org/10.26740/jim.v10n1.p123-135>

- Preston, C. C., & Colman, A. M. (2000). Optimal number of response categories in rating scales: Reliability, validity, discriminating power, and respondent preferences. *Acta Psychologica*, 104(1), 1–15. [https://doi.org/10.1016/S0001-6918\(99\)00050-5](https://doi.org/10.1016/S0001-6918(99)00050-5)
- Puspita, E. M., & Budiarti, A. (2016). Pengaruh Motivasi Belanja Hedonis Terhadap Pembelian Impulsif Melalui Emosi Positif Pelanggan Vans Store Surabaya. *Jurnal Ilmu Dan Riset Manajemen*, 5(5), 1–16. <http://jurnalmahasiswa.stiesia.ac.id/index.php/jirm/article/view/677/688>
- Rahadhini, M. D., Wibowo, E., & Lukiyanto, K. (2020). The role of positive emotion in hedonic shopping value affecting consumers' impulse buying of fashion products. *International Journal of Scientific & Technology Research*, 9(2), 780–784. <http://www.ijstr.org/final-print/feb2020/The-Role-Of-Positive-Emotion-In-Hedonic-Shopping-Value-Affecting-Consumers-Impulse-Buying-Of-Fashion-Products.pdf>
- Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). *Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS 3.0* (2nd ed.). Pearson. <https://www.goodreads.com/book/show/44057278-partial-least-squares-structural-equation-modeling-pls-sem-using-smart>
- Ranasari, D., & Fajriantih, F. (2021). Pengaruh hedonic shopping motivations terhadap impulsive buying pada konsumen produk fashion. *Buletin Riset Psikologi dan Kesehatan Mental (BRPKM)*, 1(1), 460–469. <https://doi.org/10.20473/brpkm.v1i1.25107>
- Rasheed, A., Yaqub, R. M. S., & Baig, F. J. (2017). Factors affecting impulse buying behaviors in shopping malls: Evidence from Bahawalpur Region, Pakistan. *Journal of Marketing and Consumer Research*, 39, 1–20. <https://iiste.org/Journals/index.php/JMCR/article/view/38691/39790>
- Rodrigues, R. I., Lopes, P., & Varela, M. (2021). Factors affecting impulse buying behavior of consumers. *Frontiers in Psychology*, 12, 697080. <https://doi.org/10.3389/fpsyg.2021.697080>
- Rook, D. W. (1987). The buying impulse. *Journal of Consumer Research*, 14(2), 189–199. <https://doi.org/10.1086/209105>
- Setiawan, I. K., & Sri Ardani, I. G. A. K. (2022). The role of positive emotions to increase the effect of store atmosphere and discount on impulse buying. *European Journal of Business and Management Research*, 7(1), 219–223. <https://doi.org/10.24018/ejbmr.2022.7.1.1236>
- Sindhu, M., & Kloep, M. J. (2020). Store environment and impulsive buying: The changing dynamics of consumer behavior. *Journal of Southwest Jiaotong University*, 55(4), 1–16. <https://doi.org/10.35741/issn.0258-2724.55.4.64>
- Sofi, S. A., & Nika, F. A. (2017). Role of intrinsic factors in impulsive buying decision: An empirical study of young consumers. *Arab Economic and Business Journal*, 12(1), 29–43. <https://doi.org/10.1016/j.aebj.2016.12.002>
- Sohn, Y. S., & Ko, M. T. (2021). The impact of planned vs. Unplanned purchases on subsequent purchase decision making in sequential buying situations. *Journal of Retailing and Consumer Services*, 59, 102419. <https://doi.org/10.1016/j.jretconser.2020.102419>
- Sopiyan, P., & Kusumadewi, N. (2020). Pengaruh shopping lifestyle dan positive emotion Terhadap impulse buying. *Coopetition: Jurnal Ilmiah Manajemen*, 11(3), 207–216. <https://doi.org/10.32670/coopetition.v11i3.115>
- Sumarwan, U., & Tjiptono, F. (2018). *Strategi Pemasaran dalam Perspektif Perilaku Konsumen*. PT. Penerbit IPB Press. [in Indonesian]
- Sun, G., Han, X., Wang, H., Li, J., & Wang, W. (2021). The influence of face loss on impulse buying: An experimental study. *Frontiers in Psychology*, 12, 700664. <https://doi.org/10.3389/fpsyg.2021.700664>
- Supriyanto, A. S., & Maharani, V. (2012). Metodologi Penelitian Manajemen Sumberdaya Manusia: Teori, Kuesioner dan Analisis Data. UIN-Maliki Press. [in Indonesian]
- Tarka, P., Harnish, R. J., & Babaev, J. (2022). Hedonism, hedonistic shopping experiences and compulsive buying tendency: A demographics-based model approach. *Journal of Marketing Theory and Practice*, 31(2), 1–26. <https://doi.org/10.1080/10696679.2022.2026791>
- Tett, R. P., & Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88(3), 500–517. <https://doi.org/10.1037/0021-9010.88.3.500>
- Tett, R. P., Toich, M. J., & Ozkum, S. B. (2021). Trait Activation Theory: A review of the literature and applications to five lines of personality dynamics research. *Annual Review of Organizational Psychology and Organizational Behavior*, 8(1), 199–233. <https://doi.org/10.1146/annurev-orgpsych-012420-062228>
- The Economic Times. (2022). What is impulsive buying? Definition of impulsive buying, impulsive buying meaning. *The Economic Times*. <https://economictimes.indiatimes.com/definition/impulsive-buying>
- Trimble, J. E., & Vaughn, L. (2013). Cultural measurement equivalence. In K. D. Keith (Ed.), *The Encyclopedia of Cross-Cultural Psychology* (pp. 313–319). Wiley. <https://doi.org/10.1002/9781118339893.wbecp131>
- Tyng, C. M., Amin, H. U., Saad, M. N. M., & Malik, A. S. (2017). The influences of emotion on learning and memory. *Frontiers in Psychology*, 8, 1454. <https://doi.org/10.3389/fpsyg.2017.01454>
- Ugbomhe, O. U., P. E. O., & Adomokhai, S. S. (2021). Effects of demographic factors on impulse buying behaviour of consumers in Auch, Edo State, Nigeria. *Economics and Business Quarterly Reviews*, 4(2), 120–133. <https://doi.org/10.31014/aior.1992.04.02.350>
- Verplanken, B., & Herabadi, A. (2001). Individual differences in impulse buying tendency: Feeling and no thinking. *European Journal of Personality*, 15(1\_suppl), S71–S83. <https://doi.org/10.1002/per.423>
- Verplanken, B., & Sato, A. (2011). The psychology of impulse buying: An integrative self-regulation approach. *Journal of Consumer Policy*, 34(2), 197–210. <https://doi.org/10.1007/s10603-011-9158-5>
- Vijver, F. J. R. van de, & Leung, K. (1997). *Methods and data analysis for cross-cultural research* (1637437). Sage Publications.
- Wang, X., Ali, F., Tauni, M. Z., Zhang, Q., & Ahsan, T. (2022). Effects of hedonic shopping motivations and gender differences on compulsive online buyers. *Journal of Marketing Theory and Practice*, 30(1), 120–135. <https://doi.org/10.1080/10696679.2021.1894949>
- Wang, Y., Pan, J., Xu, Y., Luo, J., & Wu, Y. (2022). The determinants of impulsive buying behavior in electronic commerce. *Sustainability*, 14(12), 7500. <https://doi.org/10.3390/su14127500>
- Weinberg, P., & Gottwald, W. (1982). Impulsive consumer buying as a result of emotions. *Journal of Business Research*, 10(1), 43–57. [https://doi.org/10.1016/0148-2963\(82\)90016-9](https://doi.org/10.1016/0148-2963(82)90016-9)
- Widagdo, B., & Roz, K. (2021). Hedonic shopping motivation and impulse buying: The effect of website quality on customer satisfaction. *The Journal of Asian Finance, Economics and Business*, 8(1), 395–405. <https://doi.org/10.13106/JAFEB.2021.VOL8.NO1.395>
- Xiao, S. H., & Nicholson, M. (2011). Mapping impulse buying: A behaviour analysis framework for services marketing and consumer research. *The Service Industries Journal*, 31(15), 2515–2528. <https://doi.org/10.1080/02642069.2011.531123>
- Zagenczyk, T. J., Smallfield, J., Scott, K. L., Galloway, B., & Purvis, R. L. (2017). The moderating effect of psychological contract violation on the relationship between narcissism and outcomes: An application of trait activation theory. *Frontiers in Psychology*, 8, 1113. <https://doi.org/10.3389/fpsyg.2017.01113>
- Zhang, Z., Zhang, N., & Wang, J. (2022). The influencing factors on impulse buying behavior of consumers under the mode of hunger marketing in live commerce. *Sustainability*, 14(4), 2122. <https://doi.org/10.3390/su14042122>