# The Difference between Consistent and Inconsistent Planned Impulse Buying Based on External Stimulus and Virtual Cart Use

Ina Melati<sup>1</sup>\*; Bernardinus M. Purwanto<sup>2</sup>; Marwah Rizqiyati<sup>3</sup>; Yulia Arisnani Widyaningsih<sup>4</sup>; Bayu Sutikno<sup>5</sup>

 <sup>1,2,4,5</sup>Department of Management, Faculty of Economics and Business, Universitas Gadjah Mada Daerah Istimewa Yogyakarta, Indonesia 55281
 <sup>3</sup>International Marketing Program, Management Department, BINUS Business School Undergraduate Program, Bina Nusantara University Jakarta, Indonesia 11480
 <sup>1</sup>ina.melati@mail.ugm.ac.id; <sup>2</sup>bm-purwanto@ugm.ac.id;
 <sup>3</sup>marwah.rizqiyati16@gmail.com; <sup>4</sup>yulia.widyaningsih@ugm.ac.id; <sup>5</sup>bayusutikno@ugm.ac.id

Received: 19th December 2023/ Revised: 12th August 2024/ Accepted: 12th August 2024

How to Cite: Melati, I., Purwanto, B. M., Rizqiyati, M., Widyaningsih, Y. A., & Sutikno, B. (2024). The Difference between Consistent and Inconsistent Planned Impulse Buying Based on External Stimulus and Virtual Cart Use. *Binus Business Review*, 15(3), 287–302. https://doi.org/10.21512/bbr.v15i3.11031

## ABSTRACT

Impulse-buying behavior is enjoyable for consumers and profitable for marketers. Selecting what they want and putting it in the shopping cart gives customers a sense of shopping enjoyment. However, the virtual shopping cart feature can be a barrier to impulse-buying behavior due to the abandonment of virtual carts. Sellers can overcome abandonment behavior in virtual carts by understanding consumer behavior, one of which is when exposed to external stimuli. The application of different external stimuli also produce different consumer behavior as well. The research aimed to validate the differences between Consistent Planned Impulse Buying (CPIB) and Inconsistent Planned Impulse Buying (IPIB) based on the influence of external stimuli: informativeness, appearance, and sales promotion, with the virtual cart used as the mediator variable using cognitive consistency theory. Data collection was carried out by distributing online questionnaires to 364 participants in Indonesia from October to November 2021 using a hierarchical linear model as the data analysis method. The analysis shows that sales promotion distinguishes between CPIB and IPIB. Sales promotions do not influence CPIB. Meanwhile, sales promotion affects IPIB. Hence, e-marketplace owners and their seller partners can apply the most appropriate external stimulus to induce impulse-buying behavior of different types. The research results also reveal a positive and significant relationship between the independent variables on virtual cart use and virtual cart on CPIB and IPIB.

**Keywords:** Consistent Planned Impulse Buying (CPIB), Inconsistent Planned Impulse Buying (IPIB), external stimulus, virtual cart use

## **INTRODUCTION**

Current developments in digitalization and technology have also encouraged the formation of user's online shopping engagement (Mir, 2023). It includes purchase motives, intentions, or buying behavior (Rather et al., 2019). Then, it encourages purchasing behavior through online media (Clement Addo et al., 2021). One form of intention is purchasing planning. In this Internet era, consumers tend to plan their purchases as stimulated by tools, situations, and conditions created by the technology that supports them (Aragoncillo & Orus, 2018). One form of the planning process is placing products in a virtual cart (Close & Kukar-Kinney, 2010), named as a pre-trip activity (Bellini & Aiolfi, 2020; Aiolfi et al., 2022). However, technology in the form of online media also encourages consumers to make impulsive purchasing decisions. Several researchers reveal that more than 50% of purchases made on online media are impulse purchases (Kimiagari & Malafe, 2021; Wu et al., 2020; Zheng et al., 2019).

Consumers' consistency in buying products in their virtual cart impulsively due to external stimulus encouragement in the e-marketplace environment where they shop can be classified as Consistent Planned Impulse Buying (CPIB). However, even though consumers already have pre-trip activities, they also deliberately plan to take part in promotional events such as National Online Shopping Day and spend more money to shop for other goods with the most exciting offers that are not planned before. During National Online Shopping Day such as "Harbolnas" (in Indonesian), some planner shoppers become impulse shoppers, as shown by the doubling number of impulse buying, it can be categorized as Inconsistent Planned Impulse Buying (IPIB). The latest data presented by Sheridan (2024) reveal that "Harbolnas" creates a shopping frenzy, excitement, and urgency in making purchasing decisions.

Cognitive consistency theory explains the consistent and inconsistent behavior of consumers. Cognitive consistency explains that self-consistency is related to attitudes and behavior. Individuals are motivated to behave based on their self-view (Wu et al., 2018). Individuals also seek confirmation of their self-view as a form of self-consistency or coherence (Krettenauer, 2020). However, with purchasing behavior, consumers may behave inconsistently with their initial purchase plans due to the influence of external stimuli they encounter around them. Generally, consumers arrange pre-trip activities before entering a retail store, which includes making a list of products they want to buy. However, consumers still desire to buy products with the most attractive offers in the store spontaneously (Bellini et al., 2017).

A specific external stimulus will encourage consumers to consistently put the same product initially as a planned purchase in their virtual cart. Meanwhile, another external stimulus will encourage consumers to put a different product than initially planned in their virtual cart inconsistently. Based on this explanation, from a theoretical point of view, consistency versus inconsistency on the CPIB versus IPIB can be viewed as a dichotomous construct. It is because the consistency versus the inconsistency that arises is not determined by the magnitude of the influence of the external stimulus but by the existence of a completely different type of external stimulus. So far, consistency versus inconsistency represents a continuum rather than a dichotomy (Kruglanski et al., 2018).

While the phenomena regarding planned impulse buying exist, discussions about it are scant, especially in the online context. For example, Stern (1962) revealed that planned impulse buying is the most common type of impulse-buying behavior. Similarly, Liao et al. (2011) also focused on one type of impulse buying decision: reminder and pure impulse buying. Meanwhile, most recent research on impulse buying has mainly focused on impulsebuying behavior in general, despite the importance of distinguishing between its types (Liu et al., 2013; Bellini et al., 2017; Verma & Singh, 2018; Chen et al., 2019; Wu et al., 2020).

Virtual carts are tools that encourage aspects of purchasing planning in online media. Consumers are often tempted to put products they are interested in in their virtual cart because of highlights from consumers' previous posts, as well as offers from brands they follow (Han, 2023). In the offline shopping process, consumers usually have utilitarian motivation when putting goods into the shopping cart (Rubin et al., 2020). Hence, the shopping cart becomes where consumers put the products they want to buy at that moment. However, in online shopping, the shopping basket becomes a place to store products of interest that will be checked out later (Song, 2019). Consumers usually have hedonic motivation when putting goods into the virtual cart (Rubin et al., 2020). So, the virtual cart becomes part of the purchasing planning.

Impulse buying has a vital role in the scope of consumer purchasing behavior (Hu et al., 2019). Specifically, impulse buying is seen as a purchase made spontaneously, immediately, and without any plan. A very impulsive buyer will make a sudden and unexpected purchase (Rook & Fisher, 1995; Redine et al., 2023). Impulsiveness also occurs when consumers decide to purchase without thinking further apart from what they want at that moment (Artadita & Firmialy, 2024). According to Stern (1962), impulse buying behavior is divided into four types based on consumers' affective and cognitive aspects. The four types are illustrated as a continuum, with the affective aspect (pure impulse buying) on the far left and the cognitive aspect (planned impulse buying) on the opposite side. More reliance on the affective aspect can result in more pure impulse buying. On the other hand, the more people rely on their cognitive aspects, the more planned their impulse buying is.

There is one exciting thing about the definition of planned impulse buying by Stern (1962). This definition sparks the initial idea for the research because it turns out that the definition corresponds to the phenomena that occur in consumer behavior in the buying and selling process through online media. In planned impulse buying, consumers have already determined purchases in general in their minds. However, purchases of certain brands are determined after consumers enter the store because of the stimulus exposure. Consumers turn stores into giant catalogs and substitute shopping lists to find and buy the products they need in stores by relying on information and stimuli available in those stores. However, in planned impulse buying, consumers have already determined specific purchases in their minds and plan to buy other products when they arrive at the store, depending on the attractive offers they will find (Stern, 1962). In the context of online media, this definition is reflected in the consumers' process of placing products in a virtual cart (Close & Kukar-Kinney, 2010), and they tend to be consistent with their initial plans by deciding to buy impulses on products already in their shopping cart.

Impulse buying refers to product purchases other than those planned in the store due to a certain stimulus influence (Muruganantham & Bhakat, 2013). In this case, consumers tend to be inconsistent with their initial purchase planning by buying products outside their initial plans. In the context of buying through e-marketplaces, consumers include products other than those in their virtual shopping cart and decide to buy them on the spot.

The consistent and inconsistent behavior of consumers with their initial plans in making purchasing behavior can be explained using cognitive consistency theory. Consistency is a relationship between individuals' beliefs that impact their actions (Singer, 1966). In other words, it can also be said that beliefs shape behavior (Prince, 2020; Kruglanski et al., 2018). The relationship between belief and behavior is also inverse, which means that the behavior produces a belief to justify it. Consistency is also seen as a tendency, encouragement, or motivation to behave in accordance with what is believed by an individual (Prince, 2020; Kruglanski et al., 2018). An individual is consistent when he or she already believes in something and behaves according to his or her beliefs. However, if individuals already believe in something but their behavior does not follow what they believe, they are inconsistent (Prince, 2020; Kruglanski et al., 2018). Individuals use a consistent cognitive thinking system to anticipate conditions that will occur and strategies for responding to them (Van Kampen, 2019), and individuals tend to maintain consistent traits within themselves (Gehlbach et al., 2019).

Cognitive consistency can be understood from two perspectives: consistency is considered as a cognitive process, or consistency is considered as a cognitive style. These two perspectives also direct thinking about purchases related to the cognitive construct of consistency, which is a continuum or dichotomous construct. In the perspective of cognitive consistency, which is a continuum construct, consistency is a cognitive process. However, when cognitive consistency is a dichotomous construct, consistency is a cognitive style. These two views raise possibilities because of differences in each individual's thinking. First, some individuals may have high style consistency by processing all the information they have believed from the start and behaving according to this information and beliefs. In contrast, others may have different styles, which form inconsistencies. Second, an individual may find some of his or her thoughts from inconsistent behavior. Hence, the individual's action for this change from inconsistency to consistency is a process, and everyone may go through a different process (Singer, 1966).

By contrast, consistency is a cognitive style. The focus of understanding consistency is on the way individuals process new information and stimuli. Consistent individuals have ways of managing information and new stimuli that starkly contrast with those who are not consistent (Singer, 1966). In the research, inconsistent consumers, especially those who are inconsistent with their initial purchase plans, tend to be significantly affected by price discounts. Meanwhile, consistent consumers will continue to buy products they have placed in their virtual cart despite discount offers. However, consistent consumers may be influenced by other external stimuli such as complete information or attractive visual product displays. Hence, the research seeks to test whether cognitive consistency is a dichotomous construct because entirely different external stimuli influence responses in the form of consistent and inconsistent behavior. Thus, the focus test uses a view of cognitive consistency as a style.

Consistency and inconsistency in purchasing can relate to compiling and writing down pre-trip activities before shopping. Pre-trip is also related to the purchase planning process. Pre-trip activities are the activity of writing a shopping list before shopping, and they can increase the likelihood of buying the products that have been planned (Bellini et al., 2017). In planning purchases through online media, shopping lists can be replaced by virtual carts.

Purchase planning through online media is even more pronounced. This kind of planning can be seen when consumers place several alternative brands of certain product classes in the virtual cart of a particular online marketplace (Close & Kukar-Kinney, 2010). E-marketplace owners and sellers need to know what activities consumers carry out in planning their product purchases, such as whether they decide to buy impulsively because of an attractive external stimulus or whether they want to stick with their initial plan. In the context of purchasing via online media, such as social networking sites, consumers are often encouraged to bypass the traditional purchasing process, which leads to impulse buying (Singh et al., 2023; Djafarova & Bowes, 2021; Han, 2023; Pellegrino et al., 2022; Wu et al., 2020; Qu et al., 2023).

An external stimulus is one of the validation tools that online sellers can apply in the online environment. Well-designed web pages are essential for building success in online business (Bleier et al., 2019). The online atmosphere is designed to affect users and positively increase favorable consumer responses (Chen & Li, 2020). Marketers and retailers traditionally utilize external stimuli, such as instore promotions and advertising, to trigger impulse shopping (Grigsby et al., 2021; Yi & Jai, 2020).

Three categories of atmospheric cues in online media drive impulse buying behavior on online media: informativeness, appearance, and sales promotion. Each aspect can influence consumers' choice to put a specific product in the virtual cart and buy it later. First, informativeness in the context of buying and selling through online media includes accurate, detailed, and navigational information that makes it easier to find information (Floh & Madlberger, 2013; Gulfraz et al., 2022). According to Close and Kukar-Kinney (2010), the more accurate and detailed the information presented and the more manageable an e-marketplace website provides the navigation, the more compelled consumers will be to include the products they are interested in the shopping cart. Hence, the researchers propose the following hypothesis.

H1a: Informativeness positively influences virtual cart use.

According to Close and Kukar-Kinney (2010), entertainment is one factor that encourages consumers to put products in a virtual shopping cart. One of the entertainment purposes that consumers put products in virtual carts, apart from fulfilling their needs for hedonic pleasure and emotional release, is due to the aesthetic enjoyment gained from looking at a website's appearance. Appearance in the context of buying and selling through online media includes different colors, eye-catching images or titles, and product images/photos on the home page of the shopping site (Liu et al., 2013). Hence, the following hypothesis is proposed.

H1b: Appearance positively influences virtual cart use.

Promotion strategies offered in online media sales include ease of website operation, discounts, free shipping, a buy one get one program, and cashback coupons (Dawson & Kim, 2009). Consumers put the products they are interested in into a virtual cart to see the advantages of each attractive offer from a seller (Close & Kukar-Kinney, 2010). Virtual carts make it easier for consumers to compare products before purchasing. Hence, the researchers propose the following hypothesis.

H1c: Sales promotion positively influences virtual cart use.

Consistency is how individuals process new information and stimuli. They tend to behave consistently if the new information or stimulus they get is per what they believe (Singer, 1966). Consumers place aspects of informativeness, appearance, and sales promotion as external stimuli that they believe will provide positive benefits for them. External stimuli will be able to influence consumers to align by putting products that are already in the initial plan into the shopping cart and impulsively buying these products. Consumers use virtual carts to hold products that attract their attention while browsing e-marketplaces (Close & Kukar-Kinney, 2010). Consumers already have an initial plan to buy products in specific categories. However, brand selection will be carried out when consumers are in the store, depending on the best offer they find (Stern, 1962).

Accurate and detailed information and the ease of navigating the website can lead to shopping enjoyment (Floh & Madlberger, 2013). Then, it will

encourage putting the product in the virtual shopping cart, resulting in impulse-buying behavior. The aesthetic appearance of the website can encourage consumers to give a positive assessment of the products on the website (Liu et al., 2013). The aesthetic appearance can influence someone to put the product in the virtual cart, leading to impulse-buying behavior (Close & Kukar-Kinney, 2010). One of the reasons consumers put products in a virtual shopping cart is to wait for the best promotion offered by the sellers so that the sales promotion applied to the products in the virtual shopping cart can encourage consumers to buy the product at that time (Close & Kukar-Kinney, 2010). Hence, the following hypothesis is proposed.

H2a, b, c: Virtual cart use mediates the relationship between informativeness (a), appearance (b), sales promotion (c), and CPIB.

The term "contrast" is used to provide a clearer understanding of the inconsistencies (Singer, 1966). In processing new stimuli and information, individuals with inconsistent behavior are contrasted with consistent individuals. In contrast to consistent individuals, inconsistent individuals will be influenced by external stimuli such as information, appearances, or sales promotions to change their initial purchase plans by placing products outside their initial purchase plans in the virtual shopping cart and then immediately buying these products at that time.

Consumers know what products they want to buy and which specific brand even before entering the store (Stern, 1962; Bellini et al., 2017). However, consumers are open to buying other brands, depending on the most attractive offers they will find in the store. This mechanism also occurs in online purchases. External stimuli can encourage consumers to buy products utterly different from those in their virtual cart. Accurate and detailed information and easy navigation can lead to the enjoyment of shopping (Floh & Madlberger, 2013) and encourage consumers to put products outside of their initial plans into the virtual cart to be purchased at that time. The appearance of an attractive website can encourage positive evaluations (Liu et al., 2013), which can encourage consumers to spontaneously put products outside of their initial plans into a virtual shopping cart and buy them immediately. According to Muruganantham and Bhakat (2013), in the type of planned impulse buying, the choice of products to be purchased by consumers is influenced by exposure to sales promotions in the store. Sales promotion is one of the external stimuli that significantly influence consumers to include products outside of their initial planning in the shopping cart and immediately buy them without thinking. Thus, the researchers propose the following hypotheses:

H3a, b, c: Virtual cart use mediates the relationship between informativeness (a), appearance (b), sales promotion (c), and IPIB.

The research framework in Figure 1 describes the relationship between variables that underlies the development of the hypotheses tested. Specifically, the research objective examines the effect of different external stimuli (informativeness, appearance, and sales promotion) on CPIB and IPIB, respectively, with a virtual cart used as a mediator. Such efforts to identify differences between the two types of impulse buying are essential. Several studies reveal that different external stimuli may, directly and indirectly, influence impulse buying behavior. External and internal stimuli also influence changes in consumer responses. Therefore, e-marketplaces should design more accurate marketing strategies, including determining the most appropriate external stimuli (Kimiagari & Malafe, 2021).

## **METHODS**

The cross-sectional research involves a total of 364 participants. Data were collected between October and November 2021 through an online questionnaire distributed through various social media channels (e.g., Instagram), messaging applications (e.g., WhatsApp), and email, this data collection mechanism was also carried out in previous research by Mayasari et al. (2023). The growth of e-commerce in Indonesia continues to increase every year (Rizi et al., 2023). The estimated number of Indonesians using e-marketplace platforms is 30 million (Das et al., 2018). The Indonesia e-commerce market is predicted to grow from USD52.93 billion in 2023 to USD86.81 billion by 2028 (Moores Rowland, 2024), this phenomenon is

representing the research population. The sample size of 364 participants is justified based on considerations of statistical power and feasibility, aiming to provide meaningful insights from a representative subset of e-marketplace users in Indonesia.

The participant inclusion criteria are as follows: Indonesians with experience shopping on e-marketplace platforms. Convenient sampling is employed to select participants according to the inclusion criteria. Indonesian respondents who have previously shopped on e-marketplace platforms are chosen. Hence, the respondents filling out this questionnaire are indeed respondents who have shopped on e-marketplace platforms because the behavior of consumers who shop on e-marketplace platforms is the primary context for the research.

The research aims to measure seven items of IPIB due to the influence of external stimuli and virtual cart use as a mediator; seven items of CPIB to the influence of external stimuli and virtual cart use as a mediator; three items of appearance, four items of informativeness, and five items of sales promotion to measure the influence of external stimuli on IPIB and CPIB: and three items of virtual cart use to measure the impact of virtual cart use as a mediator of the influence of external stimuli on IPIB and CPIB (see Appendix). All measurement tools utilized a 5-item Likert scale, with a score of one indicating strongly disagree, a score of two indicating disagree, a score of three indicating neutral, a score of four indicating agree, and a score of five indicating strongly agree (Syah et al., 2022). Then, validity and reliability are carried out to test the instruments used. Validity is carried out by conducting Exploratory Factor Analysis (EFA) testing.

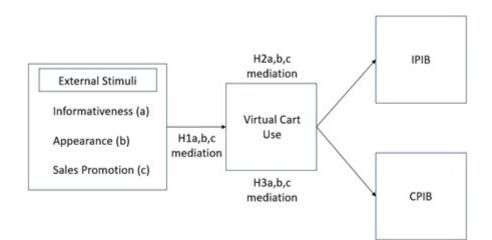


Figure 1 Research Framework

Note: Consistent Planned Impulse Buying (CPIB) and Inconsistent Planned Impulse Buying (IPIB). Source: Authors' Elaboration

#### **RESULTS AND DISCUSSIONS**

A total of 364 people respond to the research. Participants are predominantly women (n= 220, 60.8%) and currently working as employees (n=178, 49.2%). The participants' ages range from 15 to more than 45, with a mean age of 1.19 (Standard Deviation (SD)). Table 1 depicts the detailed socio-demographic information.

In Table 2, the result shows that all items are grouped in respective constructs with all loading factors above 0.5. Eight items are confirmed in the IPIB group, while seven items are in the CPIB group. Then, five items are confirmed to be in the appearance group. Moreover, three items are included in the informativeness group. Likewise, three items are in the sales promotion group. Finally, two items are included in the virtual cart use group. The result indicates the good validity of all the items.

The reliability and internal consistency of the instruments are tested using McDonald's Omega coefficient value using SPSS software version 25 (IBM, 2022). The reliability testing formula with McDonald's Omega can produce separate reliability assessments for each factor and dimension on a multidimensional scale (Heo et al., 2022). The coefficient value on McDonald's Omega is the same as the coefficient value on Cronbach's Alpha, namely between 0.0 to 1.00. In reliability testing using the McDonald's Omega formula, the reliability benchmark for an item is tested if the coefficient value is greater than 0.7 (Hair et al., 2019). In Table 3, the results show that all indicators produce a coefficient value above 0.6 (Mercado-Lara et al., 2022; Kalkbrenner, 2023)

Variables	Mean (Standard Deviation (SD))	Frequency (%)	
Age (years)	1.19		
15–25		112 (30.7)	
26–35		75 (20.6)	
36–45		77 (21.2)	
> 45		100 (27.5)	
Gender	0.49		
Male		143 (39.3)	
Female		221 (60.7)	
Occupation	1.28		
High Student		7 (1.9)	
College student		63 (17.3)	
Housewife		52 (14.3)	
Entrepreneur		51 (14.0)	
Employee		180 (49.5)	
Teacher		11 (3.0)	
Income	1.66		
< Rp 2.000.000		83 (22.8)	
Rp2.000.000-Rp4.000.000		69 (19.0)	
Rp4.000.000-Rp6.000.000		32 (8.8)	
Rp6.000.000-Rp8.000.000		35 (9.6)	
> Rp8.000.000		145 (39.8)	
Marital Status	0.49		
Married		226 (62.1)	
Single		138 (37.9)	
Number of Children	0.83		
0		152 (41.7)	
1–2		128 (35.2)	
3–4		77 (21.2)	
>4		7 (1.9)	

Table 1 Participants' Socio-Demographic

Source: Authors' Elaboration

IPIB	CPIB	Appearance	Informativeness	<b>Sales Promotion</b>	Virtual Cart Us
0.818					
0.817					
0.793					
0.784					
0.745					
0.745					
0.716					
0.707					
	0.735				
	0.716				
	0.713				
	0.711				
	0.710				
	0.612				
	0.610				
		0.818			
		0.805			
		0.799			
		0.773			
		0.763			
			0.889		
			0.877		
			0.660		
				0.841	
				0.737	
				0.687	
					0.855
					0.807

#### Table 2 Exploratory Factor Analysis for Validity Test Results

Note: Consistent Planned Impulse Buying (CPIB) and Inconsistent Planned Impulse Buying (IPIB).

Source: Authors' Elaboration

No.	Variable	McDonald's Omega Coefficient Value
1.	IPIB	0.934
2.	CPIB	0.885
3.	Appearance	0.878
4.	Informativeness	0.781
5.	Sales Promotion	0.878
6.	Virtual Cart Use	0.609

#### Table 3 McDonald's Omega Analysis for Reliability Test Results

Note: Consistent Planned Impulse Buying (CPIB) and Inconsistent Planned Impulse Buying (IPIB).

Source: Authors' Elaboration

Testing the common method variance using Harmann's single factor test shows a variance of 34.08% (below 50%). This value shows a high level of variance in answers, so it is free from common method bias (Mir, 2023). The multicollinearity test shows that each variable has a Variance Inflation Factor (VIF) value between 1 and 10. Data processing using the hierarchical linear regression analysis method is carried out using SPSS software version 25 (IBM, 2022). Table 4 shows the hierarchical linear regression analysis results.

The analysis results show a direct and positive relationship between appearance and CPIB based on the p-value of 0.000. Appearance also has a direct and positive relationship with IPIB, with a p-value of 0.000. However, there is no significant relation between informativeness and CPIB based on a p-value of 0.410. The value is bigger than 0.05. Likewise, in testing the relationship between informativeness and IPIB, the results indicate a p-value of 0.342. The results also show no direct and positive relationship between sales promotion and CPIB, with a p-value of 0.144. However, sales promotion has a direct and positive relationship with IPIB, with a p-value of 0.002. These results show that appearance has the most significant direct effect on IPIB, with a practical contribution of 44.2%, followed by sales promotion (17.4%) and informativeness with the least effect (0.025%).

Subsequent tests are carried out to determine the role of the virtual cart as a mediator of the influence of independent variables (appearance, informativeness, and sales promotion) on the dependent variable (CPIB). The first test is conducted to determine the direct effect of virtual cart use on CPIB and IPIB. The results show that virtual cart use has a direct and positive relationship, both on IPIB with a p-value of 0.018 and CPIB with a p-value of 0.007.

Furthermore, tests are carried out to compare the R-square value of the direct relationship between the independent variables (appearance, informativeness, and sales promotion) and the dependent variable (CPIB) with the R-square value of the direct relationship between the independent variables in the virtual cart use. The role of the mediator is supported if the R-square value of the direct relationship between the independent variables and the dependent variable has a smaller significance value than the R-square value of the direct relationship between the independent variables and the mediator variable. The results show that the R-square value of the direct relationship between the independent variables (appearance, informativeness, and sales promotion) and the dependent variable (CPIB) is 0.159. Meanwhile, the R-square value of the direct relationship between the independent variables and virtual cart use is 0.106. The R-square value of the direct relationship between the independent variables (appearance, informativeness, and sales promotion) is more significant than the R-square value of the direct relationship between the independent variables and virtual cart use (0.159 > 0.106). This result indicates that virtual cart use does not have the power to mediate appearance, informativeness, and sales promotion on CPIB. In other words, the findings do not support H2a, H2b, and H2c. In terms of magnitude of influence, appearance has the greatest magnitude of influence on CPIB (33.2%), followed by the effect of sales promotion (0.102%) and informativeness with the smallest effect (0.067%).

Next, the R-square value from the direct effect of appearance, informativeness, and sales promotion on IPIB is 0.263. Meanwhile, the R-square value from the direct effect of appearance, informativeness, and sales promotion on virtual cart use is 0.106. The

	Dependent Variables		
Independent Variables	Virtual Cart Use	CPIB	IPIB
Appearance		0.332*	0.442*
Informativeness		0.067	0.025
Sales Promotion		0.102	0.174*
Adj. R <sup>2</sup>		0.159	0.263
Appearance	0.148*	0.312*	0.426*
Informativeness	0.131*	0.049	-0.040
Sales Promotion	0.175*	0.077	0.154*
Virtual Cart Use		0.138*	0.113*
Adj. R <sup>2</sup>	0.106		
Virtual Cart Use		0.247*	0.250*

Table 4 Hierarchical Linear Regression Analysis Results

Note: Consistent Planned Impulse Buying (CPIB) and Inconsistent Planned Impulse Buying (IPIB). \*Significant at p < 0.05 Source: IBM SPSS Statistics for Windows, Version 25.0

R-square value from the direct effect of independent variables on dependent variables is more significant than the R-square from the direct effect of independent variables on virtual cart use (0.263 > 0.106). Thus, the use of virtual carts also does not have the power to mediate appearance, informativeness, and sales promotion on IPIB. This result does not support H3a, H3b, and H3c. In terms of magnitude of influence, these results show that appearance has the most significant effect on IPIB with the virtual cart as a mediator, with a practical contribution of 42.6%. The result is followed by the sales promotion effect (15.4%), and informativeness has the smallest effect (-0.04%). Then, virtual cart use has a more significant influence on IPIB. It can be seen from its effective contribution of 25% to IPIB compared to its effective contribution to CPIB (24.7%). Meanwhile, when the role of virtual cart use is tested by involving independent variables, it turns out that virtual cart use makes a more significant effective contribution to CPIB (13.8%) than IPIB (11.3%).

In Table 5, the findings show that appearance has a significant positive effect on virtual cart use based on the result indicating a p-value of 0.006. Therefore p-value is smaller than 0.05. Informativeness has a significant positive effect on virtual cart use based on the result indicating a p-value of 0.0015. Similarly, sales promotion has a significant positive effect on virtual cart use based on the result indicating a p-value of 0.001. These findings support H1a, H1b, and H1c. The correlation coefficient measures the magnitude of the effects that the variables have on each other. The effect of appearance on virtual cart use is 14.8%. Then, the magnitude of the effect of informativeness on virtual cart use is 13.1%, and the magnitude of the effect of sales promotion is 17.5%. These results show that sales promotion had the most significant effect on virtual cart use.

The research has shown that different external stimuli produce CPIB and IPIB responses. The research reveals that sales promotion can directly and positively influence consumers to decide on IPIB,

Hypotheses	P-Value and R-Square	Description
H1a: Informativeness positively influences virtual cart use.	0.0015	Supported
H1b: Appearance positively influences virtual cart use.	0.006	Supported
H1c: Sales Promotion positively influences virtual cart use.	0.001	Supported
H2a, b, c: Virtual cart use mediates the relationship between informativeness (a), appearance	The p-value of the direct relationship between virtual cart use and CPIB is 0.007.	Unsupported
(b), sales promotion (c), and CPIB decision.	The R-square value on the direct relationship between the independent variables (appearance, informativeness, and sales promotion) has a greater significance value than the R-square value on the direct relationship between the independent variables in the virtual cart use $(0.159 > 0.106)$ .	
H3a, b, c: Virtual cart use mediates the relationship between informativeness (a), appearance	The p-value of the direct relationship between virtual cart use and IPIB is 0.018.	Unsupported
(b), sales promotion (c), and IPIB decision.	The R-square value on the direct relationship between the independent variables (appearance, informativeness, and sales promotion) has a more excellent significance value than the R-square value on the direct relationship between the independent variables in the virtual cart use $(0.263 > 0.106)$ .	

Table 5 Summary of Hypotheses Results

Note: Consistent Planned Impulse Buying (CPIB) and Inconsistent Planned Impulse Buying (IPIB).

Source: Authors' Elaboration

while sales promotions cannot influence consumers to decide on CPIB. The contrasting responses produced by consistency and inconsistency in consumers due to the influence of external stimuli highlighted in the findings supports the theory of cognitive consistency (Singer, 1966; Kruglanski et al., 2018; Prince, 2020). The research focuses on consistency as a cognitive style, which is understanding how consistency in individuals makes them process new information and stimuli (Singer, 1966). Consistent individuals have ways of managing information and new stimuli that starkly contrast with those who do not. The research reveals that sales promotion can encourage consumers who are inconsistent with their initial plans to decide on an IPIB. Meanwhile, sales promotion cannot encourage consumers to be consistent with their initial plan to decide on a CPIB.

The results have shown that using virtual shopping carts does not mediate the influence of external stimuli on IPIB and CPIB. The definition of virtual cart use is the behavior of consumers placing the products they are interested in a virtual cart (Close & Kukar-Kinney, 2010). In the research, virtual carts are a construct to explain the initial planning of purchases and the basis for consistent and inconsistent aspects of consumer behavior in making purchase behavior. Inconsistent consumers buy products beyond their initial plan, and sales promotions influence them to buy impulsively without going through the virtual carts through the "buy now" feature. Meanwhile, for consistent consumers, the consumer first puts the product in the virtual shopping cart. However, when he or she returns to accessing the e-marketplace and sees the visual appearance of the product in the virtual cart displayed at the top of the very front of the suggested product features, he or she will immediately buy the product using the "buy now" feature.

Therefore, two questions in the research are successfully answered. First, the research results validate the argument that the constructs of consistency and inconsistency are dichotomous. Second, the leading scientific reasons supporting consistency and inconsistency are dichotomous. The research validates the idea that consistency and inconsistency in behavior arise due to the influence of different types of external stimuli, so the response is different.

However, according to Dawson and Kim (2009), there is no significant difference in the effect of various types of external impulse-trigger cues on the level of engagement in impulse buying. Meanwhile, the research finds that differences in external stimuli result in different responses in terms of purchasing behavior. Nevertheless, appearance can encourage consumers to be consistent with their initial plan to decide on CPIB. Appearance can also influence consumers to be inconsistent with their initial plans. In addition, it significantly influences CPIB more than IPIB. It is supported by previous research. Several aspects, such as different colors, images, or titles that attract attention and product images/photos on the home page of shopping sites, are external stimuli influencing impulse buying (Liu et al., 2013; Floh & Madlberger, 2013).

From the consumer's side, inconsistent consumers believe that sales promotions applied to specific brands or product categories will benefit them. Even if the brand or product category is not in their initial plan, consumers will still choose to be inconsistent by buying it impulsively. Attractive in-store offers will encourage consumers to buy impulsively, even though they have planned pre-trip activities (Bellini et al., 2017). An appearance that consistent consumers visually examine validates the initial information that is already owned regarding the brand or product category.

Two theoretical implications can be conveyed through the research results. The first is related to the theory of cognitive consistency. Previous studies have revealed that cognitive consistency is a continuum construct (Singer, 1966; Kruglanski et al., 2018). Individuals often view inconsistency as a negative thing or it has a negative impact. They will adjust the initial information or beliefs they already must change their inconsistent behavior into consistent behavior. This change is, of course, a process. However, inconsistency can be something neutral or even optimistic. In the research, inconsistent consumers still decide to buy impulsively, which is favorable for sellers.

The research validates the argument that the constructs of consistency and inconsistency on cognitive consistency are dichotomous because two different stimuli influence the two constructs. Thus, the research supports the idea that cognitive consistency should be understood as a cognitive style, not a cognitive process. In addition, inconsistency is not always damaging but can be positive or neutral (Kruglanski et al., 2018).

As found by the research, consistent and inconsistent consumer behavior still benefits online sellers. Online sellers must apply the most appropriate external stimulus to maximize positive outcomes from inconsistent consumer behavior in the buying process. In addition, online sellers should also know the initial planning mechanism used by consumers before entering the store, both in the context of online and offline stores. Information related to the mechanism of the consumer's initial planning process will be a potential stage and time for online sellers to encourage consumers to decide on impulse buying if the online seller can apply the right external stimulus.

Based on the explanation regarding the cognitive construct of consistency, which is a dichotomous construct, the research validates the notion that consumer behavior is consistent or inconsistent in their initial purchase plans because different external stimuli influence them. The findings suggest two other types of planned impulse-buying behavior: IPIB and CPIB. The influence of sales promotion distinguishes both. Sales promotion is part of an external stimulus that can affect the consumer's black box, which is a consistent and inconsistent aspect, resulting in a response in the form of a purchase behavior (Kotler et al., 2021). One reason is that sales promotions can cause consumers to buy other products than those initially planned.

The research results confirm that consumers already have an initial plan to buy certain products when shopping and can impulsively buy products consistently according to their initial plans, depending on the appearance of the product they see (Bellini et al., 2017). In purchasing through online media, appearance plays a significant role in influencing consumers to decide on impulse purchases (Liu et al., 2013). Appearance is one of the easiest things to observe, so it becomes the first consideration for consumers when buying a product. However, consumers also plan to buy products impulsively beyond their initial plans, depending on the attractive promotions they encounter in stores. This mechanism is also emphasized in online media's buying and selling process. Sales promotions play a significant role in encouraging consumers to be inconsistent with their initial plans. However, planned impulse buying generally occurs because of the influence of discounts on price (Tandon et al., 2024).

At a practical level, the Internet has transformed human civilization, including becoming the basis for social and business activities (Mir, 2023; Yamin, 2019), which is referred to as online shopping (Rahman et al., 2018). Internal stimuli, such as hedonic and utilitarian motivation (Bradley, 2023; Chaffey, 2021) and external stimuli (Dawson & Kim, 2009; Liu et al., 2013; Gulfraz et al., 2022), can influence consumer purchasing decisions through online media. So, knowing the influence of stimuli on consumer responses is something that needs to be explored by sellers.

If sellers want to encourage consumers to decide on an IPIB at promotional events, they can apply sales promotion to the fullest on promotional channels provided by e-marketplaces. Promotional channels that can be selected include feeds on promotional event pages via mobile applications, e-marketplace websites, and e-marketplace social media. There is also the option of outdoor advertising, e.g., radio and television advertisements provided by e-marketplaces. When a promotional event takes place, sales promotion has a significant influence in encouraging consumers to engage in brand switching and even product switching by buying brands or products that are entirely different from the initial plan. If sellers want to encourage consumers to decide on a CPIB, they can optimize appearances, especially by showing product photos similar to the ones placed in the virtual shopping cart. Apart from that, visually appealing and interactive websites can create a pleasant flow experience (Argyris et al., 2020).

They can also use attractive product visualization on the suggestion feed in the consumer's account. In addition, sellers also need to understand the mechanism of consumer behavior in virtual shopping carts because online shopping cart use increases the possibility of purchasing decisions (Kim & Chun, 2018). Due to the small impact of the virtual cart on IPIB and CPIB, highlighting the "buy now" feature is more necessary, especially during the National Shopping Day event. The "buy now" feature will further encourage consumers to impulsively buy the products sold at the event after being exposed to the sales promotion. The "buy now" feature allows consumers to go straight to the checkout without putting the product in the virtual shopping cart. Specifically, strategic consumers consider purchasing timing (Chen & Li, 2020). According to Braciníková and Matušinská (2020), the importance of building a specific marketing communication style for each consumer segmentation and studying consumer behavior needs to be carried out continuously. An example of this is exploring consumers' Black box, such as consumers' consistent and inconsistent behavior in their initial purchase plans.

# CONCLUSIONS

The research reveals that sales promotion plays a role in influencing other types of impulsebuying behavior, namely CPIB and IPIB. In the case of IPIB, consumers plan to look for promotions and buy products that offer the most attractive discounts. Even though they already have a specific brand in their virtual shopping cart, they will impulsively find themselves being inconsistent with their initial plan by buying something other than what they had already placed in the virtual cart.

Meanwhile, with CPIB, consumers have put several brands from one category in their virtual shopping cart. They will impulsively buy products in the virtual cart based on the validation tools they have found there, such as appearance and product information. Based on the empirical studies that have been conducted, it can also be concluded that the cognitive consistency construct is dichotomous. This perspective is validated, demonstrating two types of planned impulse-buying behavior: IPIB and CPIB.

The research has two limitations. First, the research proves that sales promotions affect IPIB and CPIB differently. However, what type of sales promotion is the best to influence consumers to decide on IPIB and CPIB has not been specifically tested. Different types of sales promotion can produce different responses in terms of impulse-buying decisions. Second, the examination conducted by the research has not been able to determine which product categories lead consumers to engage in IPIB and CPIB. Impulse buying decisions can occur in purchasing decisions for various product categories, such as low versus high involvement products or utilitarian versus hedonic products. Thus, further research can focus more on one product category to identify additional and broader practical implications for companies. Furthermore, an experimental research will be needed to examine what sales promotions are the best to influence consumers to act on IPIB and

CPIB decisions. The experimental research method will better suit studies on impulse-buying decisions because researchers can directly assess the effect of specific prompts such as "grab as soon as possible" or "grab right now" on purchasing decisions.

## ACKNOWLEDGEMENT

The research is funded by Universitas Gadjah Mada number 3550/Un1.P.iii/Ditlit/Pt.01.05/2022.

# REFERENCES

- Aiolfi, S., Bellini, S., & Grandi, B. (2022). Using mobile while shopping in-store: A new model of impulsebuying behaviour. *Journal of Consumer Marketing*, 39(5), 432–444. https://doi.org/10.1108/JCM-05-2020-3823
- 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
- Argyris, Y. A., Muqaddam, A., & Liang, Y. (2020). The role of flow in dissemination of recommendations for hedonic products in user-generated review websites. *International Journal of Human–Computer Interaction*, 36(3), 271–284. https://doi.org/10.108 0/10447318.2019.1631543
- Artadita, S., & Firmialy, S. D. (2024). How does self-control moderate shopping enjoyment and impulse buying among Generation Z online gamers? *Binus Business Review*, 15(2), 179–189. https://doi.org/10.21512/ bbr.v15i2.10697
- Bellini, S., & Aiolfi, S. (2020). Impulse buying behavior: The mobile revolution. International Journal of Retail & Distribution Management, 48(1), 1–17. https://doi.org/10.1108/IJRDM-12-2018-0280
- Bellini, S., Cardinali, M. G., & Grandi, B. (2017). A structural equation model of impulse buying behaviour in grocery retailing. *Journal of Retailing* and Consumer Services, 36, 164–171. https://doi. org/10.1016/j.jretconser.2017.02.001
- Bleier, A., Harmeling, C. M., & Palmatier, R. W. (2019). Creating effective online customer experiences. *Journal of Marketing*, 83(2), 98–119. https://doi. org/10.1177/0022242918809930
- Braciníková, V., & Matušinská, K. (2020). Clustering of Millennials by brand perceptions in relation to demographic factors. *Central European Business Review*, 9(5), 63–80. https://doi.org/10.18267/J. CEBR.253
- Bradley, T. (2023). *Amazon statistics: Key numbers and fun facts*. AMZScout. https://amzscout.net/blog/ amazon-statistics/
- Chaffey, D. (2021, May 11). A case study focusing on eBay marketing strategy: The facts, figures, and strategy behind their highest quarterly revenue.

Smart Insights. https://www.smartinsights.com/ ecommerce/ecommerce-strategy/ebay-case-study-2/

- Chen, C., & Li, X. (2020). Effects of Singles' Day atmosphere stimuli and Confucian values on consumer purchase intention. Asia Pacific Journal of Marketing and Logistics, 32(7), 1387–1405. https:// doi.org/10.1108/APJML-05-2019-0294
- Chen, C. D., Ku, E. C. S., & Yeh, C. C. (2019). Increasing rates of impulsive online shopping on tourism websites. *Internet Research*, 29(4), 900–920. https:// doi.org/10.1108/INTR-03-2017-0102
- Clement Addo, P., Fang, J., Asare, A. O., & Kulbo, N. B. (2021). Customer engagement and purchase intention in live-streaming digital marketing platforms. *Service Industries Journal*, 41(11–12), 767–786. https://doi.org/10.1080/02642069.2021.1 905798
- Close, A. G., & Kukar-Kinney, M. (2010). Beyond buying: Motivations behind consumers' online shopping cart use. *Journal of Business Research*, 63(9–10), 986– 992. https://doi.org/10.1016/j.jbusres.2009.01.022
- Das, K., Tamhane, T., Vatterott, B., Wibowo, P., & Wintels, S. (2018, August). The digital archipelago: How online commerce is driving Indonesia's economic development. McKinsey & Company. https://www. mckinsey.com/spContent/digital\_archipelago/index. html
- Dawson, S., & Kim, M. (2009). External and internal trigger cues of impulse buying online. *Direct Marketing: An International Journal*, 3(1), 20–34. https://doi. org/10.1108/17505930910945714
- Djafarova, E., & Bowes, T. (2021). 'Instagram made me buy it': Generation Z impulse purchases in fashion industry. *Journal of Retailing and Consumer Services*, 59. https://doi.org/10.1016/j.jretconser.2020.102345
- Floh, A., & Madlberger, M. (2013). The role of atmospheric cues in online impulse-buying behavior. *Electronic Commerce Research and Applications*, 12(6), 425– 439. https://doi.org/10.1016/j.elerap.2013.06.001
- Gehlbach, H., Robinson, C. D., & Vriesema, C. C. (2019). Leveraging cognitive consistency to nudge conservative climate change beliefs. *Journal of Environmental Psychology*, 61, 134–137. https://doi. org/10.1016/j.jenvp.2018.12.004
- Grigsby, J. L., Jewell, R. D., & Campbell, C. (2021). Have your cake and eat it too: How invoking postpurchase hyperopia mitigates impulse purchase regret. *Marketing Letters*, 32, 75–89. https://doi. org/10.1007/s11002-020-09536-6
- Gulfraz, M. B., Sufyan, M., Mustak, M., Salminen, J., & Srivastava, D. K. (2022). Understanding the impact of online customers' shopping experience on online impulsive buying: A study on two leading e-commerce platforms. *Journal of Retailing and Consumer Services*, 68. https://doi.org/10.1016/j. jretconser.2022.103000
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis*. Cengage.

- Han, M. C. (2023). Checkout button and online consumer impulse-buying behavior in social commerce: A trust transfer perspective. *Journal of Retailing and Consumer Services*, 74. https://doi.org/10.1016/j. jretconser.2023.103431
- Heo, W., Rabbani, A., Grable, J. E., & Roszkowski, M. (2022). The alpha and omega of financial risktolerance assessment. *Financial Planning Review*, 5(1), 1–11. https://doi.org/10.1002/cfp2.1138
- Hu, X., Chen, X., & Davidson, R. (2019). Social support, source credibility, social influence, and impulsive purchase behavior in social commerce. *International Journal of Electronic Commerce*, 23(3), 297–327. https://doi.org/10.1080/10864415.2019.1619905
- IBM. (2022, September 1). Downloading IBM SPSS Statistics 25. https://www.ibm.com/support/pages/ downloading-ibm-spss-statistics-25
- Kalkbrenner, M. T. (2023). Alpha, omega, and H internal consistency reliability estimates: Reviewing these options and when to use them. Counseling Outcome Research and Evaluation, 14(1), 77–88. https://doi. org/10.1080/21501378.2021.1940118
- Kim, N & Chun, S. (2018). Add to cart or buy it now? Factors influencing the usage intention of online shopping cart. *Journal of Information Technology Applications & Management*, 25(2), 117–132.
- Kimiagari, S., & Malafe, N. S. A. (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. https://doi.org/10.1016/j. jretconser.2021.102567
- Kollat, D. T., & Willett, R. P. (1967). Customer impulse purchasingbehavior. *Journal of Marketing Research*, 4(1), 21–31. https://doi.org/10.1177/002224376700400102
- Kotler, P., Keller, K. L., & Chernev, A. (2021). *Marketing management*. Pearson Education.
- Krettenauer, T. (2020). Moral identity as a goal of moral action: A Self-Determination Theory perspective. *Journal of Moral Education*, 49(3), 330–345. https:// doi.org/10.1080/03057240.2019.1698414
- Kruglanski, A. W., Jasko, K., Milyavsky, M., Chernikova, M., Webber, D., Pierro, A., & Di Santo, D. (2018).
  Cognitive Consistency Theory in Social Psychology: A Paradigm Reconsidered. *Psychological Inquiry*, 29(2), 45–59. https://doi.org/10.1080/104784 0X.2018.1480619
- Liao, S. L., Shen, Y. C., & Chu, C. H. (2011). The effects of sales promotion strategy, product appeal and consumer traits on reminder impulse buying behaviour. *International Journal of Consumer Studies*, 35(5), 601. https://doi.org/10.1111/j.1470-6431.2009.00770.x
- Liu, Y., Li, H., & Hu, F. (2013). Website attributes in urging online impulse purchase: An empirical investigation on consumer perceptions. *Decision Support Systems*, 55(3), 829–837. https://doi.org/10.1016/j. dss.2013.04.001

- Mayasari, I., Haryanto, H. C., Hutagaol, O. D., Ramadhan, A. R., & Amir, I. (2023). Examining the role of social media marketing on brand love and its impact on brand centrality: The study of local fashion brands for the Millennials. *Journal of Indonesian Economy and Business*, 38(2), 147–165. https://doi. org/10.22146/jieb.v38i2.5364
- Mercado-Lara, M. F., Campo-Arias, A., & Monterrosa-Castro, Á. (2022). Validity and reliability of the Spanish version of fear of COVID-19 scale in Colombian physicians. *International Journal of Mental Health and Addiction*, 20, 1122–1129. https://doi.org/10.1007/s11469-020-00430-w
- Mir, I. A. (2023). Self-escapism motivated online shopping engagement: A determinant of users' online shopping cart use and buying behavior. *Journal of Internet Commerce*, 22(1), 40–73. https://doi.org/10.1080/15 332861.2021.2021582
- Moores Rowland. (2024, February). *E-commerce growth, digital business expectations for 2024, and related issues.* https://www.moores-rowland.com/articles/Ecommerce-Growth-Digital-Business-Expectationsfor-2024-and-Related-Issues
- Muruganantham, G., & Bhakat, R. S. (2013). A review of impulse buying behavior. *International Journal* of Marketing Studies, 5(3), 149–160. https://doi. org/10.5539/ijms.v5n3p149
- Pellegrino, A., Abe, M., & Shannon, R. (2022). The dark side of social media: Content effects on the relationship between materialism and consumption behaviors. *Frontiers in Psychology*, 13, 1–15. https://doi. org/10.3389/fpsyg.2022.870614
- Prince, M. (2020). Domestic product involvement and consumer willingness to buy domestic products: Empirical testing of a Cognitive Consistency Theory Framework. *Journal of International Consumer Marketing*, 32(5), 453–461. https://doi.org/10.1080 /08961530.2020.1727393
- Qu, Y., Khan, J., Su, Y., Tong, J., & Zhao, S. (2023). Impulse buying tendency in live-stream commerce: The role of viewing frequency and anticipated emotions influencing scarcity-induced purchase decision. *Journal of Retailing and Consumer Services*, 75, 1–12. https://doi.org/10.1016/j. jretconser.2023.103534
- Rahman, M. A., Islam, M. A., Esha, B. H., Sultana, N., & Chakravorty, S. (2018). Consumer buying behavior towards online shopping: An empirical study on Dhaka city, Bangladesh. *Cogent Business & Management*, 5(1), 1–22. https://doi.org/10.1080/23 311975.2018.1514940
- Rather, R. A., Hollebeek, L. D., & Islam, J. U. (2019). Tourism-based customer engagement: The construct, antecedents, and consequences. *The Service Industries Journal*, *39*(7–8), 519–540. https://doi.or g/10.1080/02642069.2019.1570154
- Redine, A., Deshpande, S., Jebarajakirthy, C., & Surachartkumtonkun, J. (2023). Impulse buying:

A systematic literature review and future research directions. *International Journal of Consumer Studies*, 47(1), 3–41. https://doi.org/10.1111/ijcs.12862

- Rizi, Y. A., Dharma, F., Amelia, Y., & Prasetyo, T. J. (2023). Factors affecting trust and interest in transactions by Indonesian MSME sellers in e-commerce. *Journal* of Indonesian Economy and Business, 38(1), 19–42. https://doi.org/10.22146/jieb.v38i1.4394
- Rook, D. W., & Fisher, R. J. (1995). Normative influences on impulsive buying behavior. *Journal of Consumer Research*, 22(3), 305–313. https://doi. org/10.1086/209452
- Rubin, D., Martins, C., Ilyuk, V., & Hildebrand, D. (2020). Online shopping cart abandonment: A consumer mindset perspective. *Journal of Consumer Marketing*, 37(5), 487–499. https://doi.org/10.1108/ JCM-01-2018-2510
- Sheridan, N. (2024). *Shopee marketing strategy 2024: A case study*. Latterly.org. https://www.latterly.org/ shopee-marketing-strategy/
- Singer, J. E. (1966). Motivation for consistency. In S. Feldman (Ed.), Cognitive consistency: Motivational antecedents and behavior consequents (pp. 47–73). Academic Press.
- Singh, P., Sharma, B. K., Arora, L., & Bhatt, V. (2023). Measuring social media impact on impulse buying behavior. *Cogent Business & Management*, 10(3), 1–21. https://doi.org/10.1080/23311975.2023.2262371
- Song, J. D. (2019). A study on online shopping cart abandonment: A product category perspective. *Journal of Internet Commerce*, 18(4), 337–368. https://doi.org/10.1080/15332861.2019.1641782
- Stern, H. (1962). The significance of impulse buying today. Journal of Marketing, 26(2), 59–62. https://doi. org/10.2307/1248439
- Syah, T. Y. R., Alimwidodo, P. C., Lianti, L., & Hatta, H. (2022). Perceived price as antecedent of satisfaction and loyalty: Learn from fast food multinational restaurants in Indonesia. *Central European Business Review*, 11(4), 63–84. https://doi.org/10.18267/j.cebr.304

- Tandon, J., Vikas, Yadav, R., & Saurabh, A. D. (2024). An integrative review on online impulse buying: Antecedents and consequences. Academy of Marketing Studies Journal, 28(2), 1–12.
- Van Kampen, H. S. (2019). The principle of consistency and the cause and function of behaviour. *Behavioural Processes*, 159, 42–54. https://doi.org/10.1016/j. beproc.2018.12.013
- Verma, H., & Singh, S. (2018). Interpretive structural modelling for e-impulse buying: An Indian study. *International Journal of Electronic Marketing and Retailing*, 9(3), 288–306. https://doi.org/10.1504/ IJEMR.2018.092698
- Wu, I. L., Chiu, M. L., & Chen, K. W. (2020). Defining the determinants of online impulse buying through a shopping process of integrating perceived risk, expectation-confirmation model, and flow theory issues. *International Journal of Information Management*, 52. https://doi.org/10.1016/j. ijinfomgt.2020.102099
- Wu, L. Z., Birtch, T. A., Chiang, F. F. T., & Zhang, H. (2018). Perceptions of negative workplace gossip: A Self-Consistency Theory framework. *Journal* of Management, 44(5), 1873–1898. https://doi. org/10.1177/0149206316632057
- Yamin, M. (2019). Information technologies of 21st century and their impact on the society. *International Journal* of Information Technology, 11, 759–766. https://doi. org/10.1007/s41870-019-00355-1
- Yi, S., & Jai, T. (2020). Impacts of consumers' beliefs, desires and emotions on their impulse buying behavior: Application of an integrated model of belief-desire theory of emotion. *Journal of Hospitality Marketing* & *Management*, 29(6), 662–681. https://doi.org/10.1 080/19368623.2020.1692267
- Zheng, X., Men, J., Yang, F., & Gong, X. (2019). Understanding impulse buying in mobile commerce: An investigation into hedonic and utilitarian browsing. *International Journal of Information Management*, 48, 151–160. https://doi.org/10.1016/j. ijinfomgt.2019.02.010

# APPENDIX

Item	Reference
Inconsistent Planned Impulse Buying (IPIB)	Rook and Fisher (1995);
I often spontaneously buy other products and brands that are different from those I have planned.	Stern (1962)
With little deliberation, I will decide to buy another product and brand that is different from the one I have previously planned.	
I will immediately decide to buy another product and brand that is different from the one I have previously planned when seeing the product.	
I often buy other products and brands that are different from those I have planned before without considering the reason for buying them.	
Sometimes, I suddenly want to buy other products and brands that are different from what I have planned.	
I tend to buy other products and brands that are different from the particular product and brand I have planned according to how I feel at the time.	
I tend to rashly buy other products and brands that are different from the particular products and brands that I have planned.	
Consistent Planned Impulse Buying (CPIB)	Rook and Fisher (1995);
I often spontaneously buy one brand from a wide selection of brands on the identical product type I have planned to purchase.	Stern (1962)
Without consideration, I tend to choose one brand from a wide selection of brands for a product type I have planned to purchase.	
With little deliberation, I will buy one of the brands from a wide selection of brands on the same type of product that I have previously planned.	
I will immediately decide to buy one brand from a wide selection of brands on the same product type I have planned upon seeing the brand.	
I tend to buy one brand from a wide selection of brands on the same type of product that I have planned before without thinking about the reason for buying it.	
Sometimes, I suddenly buy one brand from a wide selection of brands for the same type of product that I have planned.	
I will buy one brand from a wide selection of brands of the identical product type I have planned according to how I feel.	
Informativeness	Floh and Madlberger (2013);
The reason I shop at the e-marketplace is that it provides accurate information.	Gulfraz et al. (2022)
I shop at e-marketplaces because they provide complete and detailed information.	
Navigating the e-marketplace makes searching for specific information more accessible and effective.	
Appearance	Liu et al. (2013)
The different colors used in shopping sites visually influence me to make purchases.	
An eye-catching image or title on the homepage of the shopping site makes me want to browse the site and complete purchases.	
Product images/photos on shopping sites illustrate the product's quality, encouraging me to purchase.	

Sales PromotionDawson and Kim (2009)Shopping sites are easy to useDiscounts are the reason I purchase products.Free shipping entices me to make purchases.Buy one get one is the reason I purchase products.Cashback coupons grab my attention to making a purchase.Kollat and Willet (1967)Virtual Cart UseKollat and Willet (1967)I put various alternative brands on the virtual cart in the same product class.Kollat and Willet (1967)I have determined several brand choices to evaluate before entering the

e-marketplace.