






“Flash sale and online impulse buying: Mediation effect of emotions”

AUTHORS

Martaleni Martaleni 
Ferdian Hendrasto 
Noor Hidayat 
Amin Alfandy Dzikri 
Ni Nyoman Kerti Yasa 

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Martaleni Martaleni, Dr., Associate Professor, Management Department, University of Gajayana Malang, Indonesia. (Corresponding author)

Ferdian Hendrasto, Dr., Lecturer, Management Department, University of Gajayana Malang, Indonesia.

Noor Hidayat, Dr., Lecturer, Faculty of Science, Brawijaya University, Indonesia.

Amin Alfandy Dzikri, Student, Management Department, University of Gajayana Malang, Indonesia.

Ni Nyoman Kerti Yasa, Lecturer, Professor, Faculty of Economics and Business, University of Udayana, Indonesia.

Martaleni Martaleni (Indonesia), **Ferdian Hendrasto** (Indonesia), **Noor Hidayat** (Indonesia), **Amin Alfandy Dzikri** (Indonesia), **Ni Nyoman Kerti Yasa** (Indonesia)

FLASH SALE AND ONLINE IMPULSE BUYING: MEDIATION EFFECT OF EMOTIONS

Abstract

Flash sale (FS) is a marketing strategy that is widely used and developed in sales through e-commerce. The implementation of the FS strategy is to provide discounts or special propositions on products offered within a certain time limit. Time restrictions aim to encourage consumers' emotions to make impulse buying (IB). This study examines the effect of consumer emotions as a mediating variable on IB among Shopee consumers in Indonesia caused by FS activities that are not carried out on certain important days. The required data were collected through the distribution of online questionnaires to respondents who, in the last three months, had made transactions through Shopee e-commerce platform. A total of 150 questionnaires are analyzed using PLS-SEM. The results of the analysis show that the flash sale strategy carried out by the Shopee e-commerce platform in Indonesia has a direct effect on increasing consumer emotions. This means that the higher the intensity of the FS promotion, the stronger the influence on consumer emotions. Emotions increase IB. FS has no significant effect on increasing IB. Subsequent findings show that FS indirectly has a positive and significant effect on IB through emotions. In other words, this study proves that the emotions are a mediating variable in online IB. This study is helpful for companies in developing appropriate strategies for their promotions in utilizing consumers' impulse buying behavior by using strategies that trigger consumers' emotions.

Keywords

consumer emotion, impulse buying, e-commerce, flash sale

JEL Classification

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INTRODUCTION

Online shopping is booming (van de Sanden et al., 2020) and has changed the consumption patterns of many consumers. As an e-commerce platform grows larger and is recognized by more consumers, limitations in utilizing features such as its core business model can become prominent (Liu et al., 2021). Daily shopping through websites represents a tempting shopping context due to hedonic and social motives and the opportunity to communicate deeper, clearer, more trustworthy, meaningfully, and bring about exchanges. The rapid growth in the online business industry has spawned many innovative business models, including flash sale (FS). Flash sale is an e-marketplace model that provides discounts or special discounts on products offered within a certain time limit (Kukar-Kinney et al., 2016; Zhang et al., 2018) and is an interesting form of new distribution channel. The period of use of the FS is limited only to the period of "need" (Berezina et al., 2016). This limited execution of FS strategy aims to induce a sense of urgency and, therefore, trigger impulse buying (IB) (Chan et al., 2017).

The attention of scientists to online IB continues to increase. Most e-commerce studies view consumer decision-making as a rational process based on cognitive problem solving and information processing (Chan et al., 2017). Various internal and external stimuli affect



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the online consumer buying process. For this reason, online merchants must be able to make efforts to increase consumers' external and internal stimuli so that the IB of consumers continues to increase (Kimiagari & Asadi Malafe, 2021).

In Indonesia, all online marketplaces hold FS. Usually, FS will last 2-4 hours but consists of several sessions each day with items sold differently in each session, according to consumer preferences. This strategy allows online marketplaces to build a competitive advantage by building a market consisting of consumers with little or no prior purchase planning. In addition, a promotional model that creates a state of urgency or incongruence can also act as an ingenious marketing strategy to create word-of-mouth and attract more consumers (Babić et al., 2016; Hendrasto & Utama, 2019). Consumers can feel happy when the FS period lasts and feel a little depressed because FS only lasts for a limited time. This will make them more likely to make purchases through the platform.

1. LITERATURE REVIEW AND HYPOTHESES

Previous studies have made outstanding contributions and focused on brick and mortar stores. However, a dearth of studies explores FS as a sales promotion medium in encouraging IB in the online marketplace. In fact, with the development of the internet, and the shift in consumer behavior from traditional to online purchases, marketers need to understand the role of emotions in triggering unplanned purchases in the digital environment. Meanwhile, research results that show the emotional role of customers in mediating the relationship between FS and IB in the context of shopping on the online marketplace are very limited. Therefore, considering the importance of sales promotion activities through FS in increasing sales (Zhang et al., 2018), it is deemed necessary to understand the benefits of FS in different contexts.

Flash sales are becoming a popular form of e-commerce and have seen impressive success (Liu et al., 2021). The FS platform has two functions: to promote products and increase demand in the sales period (Zhang et al., 2018). In addition, FS can generate greater post-sale product returns for merchants selling seasonal products (Liu et al., 2021). Flash sale can cause consumers to make unplanned purchases, known as impulse buying. IB is also important to recognize (Rook & Fisher, 1995; Stern, 1962) and has evolved in recent decades (Bandyopadhyay et al., 2021; Febrilia & Warokka, 2021). Customers usually make unplanned purchases when exposed to provocative stimuli (Chan et al., 2017). This purchase is some-

times accompanied by a strong desire and a pleasant taste (Wu et al., 2020) but not infrequently leads to regret after making a purchase (Chang & Tseng, 2014).

Consumer behavior researchers pay much attention to IB behavior (Bandyopadhyay et al., 2021). Historically, the presence of IB has been a differentiator with unplanned impulsive buying behavior (Sundström et al., 2019). Based on recent research, IB is categorized into three thematic contexts: offline stores, websites, and social media. On the other hand, much online shopping is associated with online IB (Djafarova & Bowes, 2021; Kimiagari & Asadi Malafe, 2021; Lee & Kacen, 2018; Lo et al., 2016; Wu et al., 2020). The attention of scientists across disciplines to online IB continues to increase (Chan et al., 2017). Various internal and external stimuli affect the online buying process. For this reason, online merchants must be able to increase consumers' external and internal stimuli so that the IB of consumers continues to increase (Kimiagari & Asadi Malafe, 2021).

Business people originally developed flash sale or FS promotion strategy to sell excess inventory at discounted prices, especially in brick and mortar stores (Zhang et al., 2018). With the development of the internet, as well as the rise of online marketplaces, this strategy has also been adopted online (Yasa et al., 2021). The implementation of FS in online business is basically the same as in conventional business. The seller will offer consumers special promos of short duration, limited number of items, and significant discounts from time to time. When the promo occurs, consumers must have joined the platform that provides FS;

only then do consumers participate in the FS (Shi & Chen, 2015; Zhang et al., 2018). In general, FS is held for a very limited time, and there are not many items for sale. Therefore, this promotional model targets consumers who are sensitive to price and those who usually do not have a prior purchase plan – in other words, encourages consumers to do IB (Zhang et al., 2018). On the other hand, significant discounts and short holding times build a perception of scarcity of goods, create a high perception of value for goods, and cause the occurrence of IB (Gierl et al., 2008).

The literature and previous research prove that sales promotion strategies with FS provide many benefits not only for consumers, but also for sellers (Shi & Chen, 2015; Zhang et al., 2018). Flash sale can help sellers attract more consumers to buy expensive luxury goods, which in normal times consumers cannot afford to buy (Durmuş et al., 2015). In addition, FS can also build loyalty, increase sales, and accelerate sales of remaining inventory. Flash sales can also stimulate consumers' desire to buy, making consumers think that the products sold are unique and difficult to find. The proper and careful implementation of FS can also help certain brands to sell new products (Zhang et al., 2018). It is important to analyze flash sale and its relationship with consumer behavior (Shi & Chen, 2015). Previous studies in the context of FS have proven that this strategy effectively increases sales and encourages consumers to make unplanned purchases. Based on this description, it can be said that the repertoire of FS strategies can be developed and linked to the emotions felt by consumers when exposed to FS.

Emotions is a rather tricky concept to explain, so the definition of emotion should be understood carefully. Emotions come in many forms. Therefore, emotions are generally divided into 2 groups, namely negative and positive. Positive emotions are usually manifested because of pleasant feelings and encourage individuals to approach stimuli such as happiness, satisfaction, and appreciation. In contrast, negative emotions are usually caused by unpleasant feelings such as sadness, anger, disappointment, feeling sick, and others (Scherer, 2005).

These two types of emotions play an essential role in person's behavior. Positive emotions can be traced from the Pleasure Arousal Dominance

Theory (PAD). For example, there is a psychological perspective to understand human emotions that ultimately affect their assessment ability and response to a particular thing (Russell & Mehrabian, 1974). Pleasure is a feeling of happiness, satisfaction, or joy, while arousal is a feeling that arises when consumers are stimulated or excited (Chang et al., 2014). Negative emotions are represented by feelings such as anxiety, fear, and depression. These negative emotional manifestations play a vital role in IB (Darrat et al., 2016; Williams & Grisham, 2012).

Previous studies that examined emotions in marketing found that emotions played an important role in triggering impulsive buying (He et al., 2018; Ko et al., 2015). Consumers who feel positive and/or negative emotions are more likely to make unplanned purchases (Ko et al., 2015). Positive emotions play a role in driving future purchase interest in the luxury fashion industry. Feelings of pleasure and joy affect Facebook behavior. Vogt et al. (2014) found that consumers with strong negative emotions were more likely to engage in unplanned purchases. It was also found that negative emotions arising from excessive stress make consumers do more AI. However, many previous studies have focused on brick-and-mortar stores, and not many have conducted studies on online marketplaces. In fact, with the development of the internet, and the shift in consumer behavior from traditional purchases to online purchases, marketers need to understand the role of emotions in triggering unplanned purchases in the digital environment (Zheng et al., 2020). Gift giving is positively related to perceived enjoyment and social interaction, which strongly affects IB (Zhang et al., 2021). Based on the results of several studies, the stimulus that encourages consumers to do IB is classified into four main factors, namely: a) psychological factors (Amos et al., 2014; Febrilia & Warokka, 2021; Parsad et al., 2021; Sundström et al., 2019); b) environmental factors; c) situational factors (Febrilia & Warokka, 2021); and d) marketing-mix factors (Rook & Fisher, 1995; Zhang et al., 2021).

Impulse buying (IB) is an unplanned purchase. It can also be defined as a transaction that quickly goes through a decision-making process (Xiao & Nicholson, 2013). Other experts define IB as a sudden, strong, and persistent decision to buy

a product as quickly as possible (Rook & Fisher, 1995). Massive penetration, coupled with changes in people’s lifestyles, make the internet a part of consumers’ daily lives. Consumers can easily search for information and buy products from the comfort of their homes without having to spend time on the go. Compared to traditional shopping, online shopping has a higher IB potential (Wu et al., 2020).

Several research results indicate conditions that can affect consumer IB. The first is the past experience (Ayadi et al., 2013). Second, a better mood will have an impact on the value of hedonic shopping and tend to have a significant effect on consumer IB. Mood is considered a critical factor and has played an important role in the retail industry (Parsad et al., 2021). Third, advertisements, one’s opinion, and content can stimulate positive emotions, which in turn trigger IB (Djafarova & Bowes, 2021). Fourth, the opinions of colleagues on social networking sites have a considerable effect on consumers’ desire to do IB. Fifth, other people with stronger social ties are likely to encourage consumers to do IB to buy more impulsively (Chen et al., 2016).

This phenomenon makes many researchers interested in conducting research on IB. For example, social media plays a vital role in determining purchasing decisions, one of which is IB. However, many studies still show inconsistencies, both in formulating the IB concept and defining its determinants (Amos et al., 2014; Aruna & Santhi, 2015; Badgaiyan et al., 2016). Nevertheless, the unplanned buying process has a complexity that the traditional buying process lacks, for example, from the psychological side and the risks faced. Fu et al. (2018) found that consumers’ emotional state affects a person’s tendency to make unplanned purchases. Understanding the factors that affect IB, especially in the internet age, is important for business purposes. The role of the impulse to buy

is a mediator (Bandyopadhyay et al., 2021). The results showed a significant effect of merchandise attractiveness, enjoyment, and online store communication style, mediated by consumer emotions. Mood also affects online impulse buying (Febrilia & Warokka, 2021). In general, in marketing value analysis, it is very rare to integrate it with the emotions; passion of potential buyers has significant marketing implications for retailers (Chan et al., 2017). Perceived stress is positively related to pressure in online purchases (Zheng et al., 2020).

Based on the literature review, it can be seen that consumers can feel happy when the FS period lasts and also feel a little depressed because FS only lasts for a limited time. This will make them more likely to make purchases through the platform. This sale tends to encourage someone to do IB. The aim of the study is to analyze the direct effect of FS on emotions, examine the direct effect of emotions on IB, the direct effect of FS on IB, and the indirect effect of FS on IB through emotions. For this paper, consumers of online marketplaces in Indonesia were selected in the context of online shopping using the Shopee application. Therefore, the paper formulated 4 hypotheses and a conceptual model (Figure 1).

- H1: Flash sale has a significant effect on emotions.
- H2: Emotions have a significant effect on impulse buying.
- H3: Flash sale has a significant effect on impulse buying.
- H4: Flash sale has a significant effect on impulse buying through emotions.

This study aims to determine the effect of FS on emotions and IB. Second, this paper determines the effect of emotions on IB, and finally, the mediating effect of emotions on the influence of FS on IB.

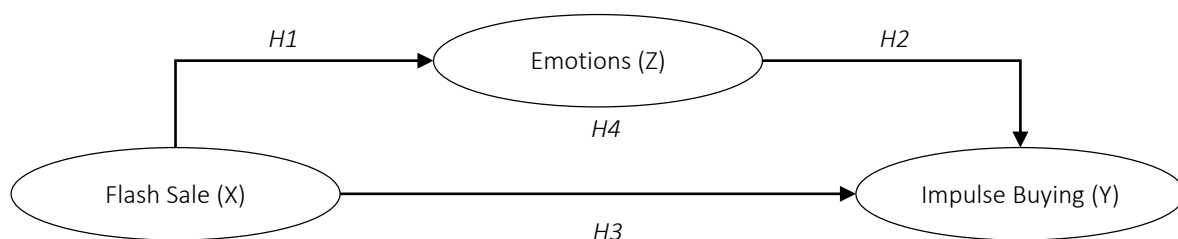


Figure 1. Research model

2. METHODS

This study is a quantitative research that examines the effect of FS on IB through emotions. The research population is online marketplace consumers in Indonesia. The Shopee e-commerce platform was chosen in this study because Shopee is the number 1 consumer choice platform in Indonesia. Flash sale activities on this platform are carried out 7 times a day. The sampling method is a purposive sampling technique. The sample criteria are as follows: (1) consumers who use the online marketplace platform and (2) consumers who had purchased products when FS went through the platform within the last three months. The data collection technique used a questionnaire distributed online, in which the questionnaire was designed with a 5-point Likert measurement scale (ranging from strongly disagree to strongly agree). The collected data were analyzed using PLS-SEM (Partial Least Square – Structural Equation Modeling). The number of questionnaires analyzed came from 150 respondents. This number of respondents is considered quite repre-

sentative (Hair Jr et al., 2018). The FS variable uses 5 indicators (Shi & Chen, 2015; Zhang et al., 2018), positive emotions use 2 indicators (Zheng et al., 2020), negative emotions use 2 indicators (Darrat et al., 2016; Ko et al., 2015), and IB uses 4 indicators (Badgaiyan et al., 2016; Husnain et al., 2019).

Demographic details of 150 respondents based on gender and age are listed in Table 1.

Based on Table 1, respondents consist of 22% male and 78% female. Based on age, 96% of respondents aged 17-25 years, between 26-30 years old are 2%, and over 30 years old are 2%. This can be interpreted that consumers who shop in online marketplaces are dominated by women aged 17-25 years.

3. RESULTS

The measurement model test results are listed in Table 2, which shows that the loading range is 0.576-0.897 of 13 items or indicators of 3 variables. In the outer model on the FS variable, 4

Table 1. Respondent demographics

Source: Primary data processed.

Category		Number of Respondents	Percentage (%)
Gender	Male	33	22%
	Female	117	78%
Age	17-25	144	96%
	26-30	3	2%
	>30	3	2%

Table 2. Validity and reliability testing

Source: Primary data processed.

Construct	Indicator	Items	FS (X1.1)	Emotion (Z1.1)	IB (Y1.1)	AVE	Composite Reliability (CR)	Cronbach's alpha (CA)
FS	The amount of the discount during the FS promotion	X1.1	0.841	0.013	-0.038	0.563	0.864	0.801
	FS promotion frequency	X1.2	0.791	0.209	-0.232			
	FS promotion period	X1.3	0.772	0.164	0.069			
	The number of products available at the time of the FS promotion	X1.4	0.743	0.382	0.238			
	Interesting FS promotion	X1.5	Not Valid					
Emotions	Happy	Z1.1	0.123	0.807	-0.383	0.703	0.904	0.858
	Stimulated	Z1.2	0.049	0.783	-0.126			
	Afraid	Z1.3	-0.023	0.897	0.193			
	Worried	Z1.4	-0.136	0.862	0.272			
IB	Spontaneous purchase	Y1.1	0.027	0.207	0.800	0.634	0.874	0.807
	Strength, compulsion, and intensity	Y1.2	0.067	0.057	0.782			
	Indifference to consequences	Y1.3	0.172	0.039	0.785			
	Not resisting the urge to shop	Y1.4	0.074	0.186	0.817			

Table 3. Model fit test results

Source: Primary data processed.

Criteria	Results	Condition	Conclusion
APC	0.391, $p < 0.001$	$p \leq 0.05$	Fulfilled
ARS	0.372, $p < 0.001$	0.19 (small)	Large
		0.33 (medium)	
		0.67 (large)	
AARS	0.366, $p < 0.001$	$p \leq 0.05$	Fulfilled
AVIF	1.163	Fulfilled if ≤ 5 , ideal if ≤ 3.3	Ideal
AFVIF	2.012	Fulfilled if ≤ 5 , ideal if ≤ 3.3	Ideal
GoF	0.485	Small if ≥ 0.1 (small) ≥ 0.25 (medium) ≥ 0.36 (large)	Large
SPR	1.000	Fulfilled if ≥ 0.7 , ideal if = 1	Fulfilled
RSCR	1.000	Fulfilled if ≥ 0.9 , ideal if = 1	Ideal
SSR	1.000	Fulfilled if ≥ 0.7	Fulfilled
NLBCCR	1.000	Fulfilled if ≥ 0.7	Fulfilled

indicators have met the requirements of greater than 0.70, and one indicator has been eliminated, namely X1.5. Thus, there are only 4 indicators that will be further analyzed in the PLS inner model. Meanwhile, emotions and IB variables have met the loading factor requirements.

Discriminant validity was assessed based on cross-loading measurements with constructs. If the correlation of the construct with the measurement item is greater than the size of the other constructs, it indicates that the indicator really represents the latent variable. From Table 2, the loading value on the overall indicators of each variable is greater than the other latent variables. Discriminant validity criteria can be said to meet the requirements of good criteria.

Another way to measure discriminant validity is to look at the value of the square root of average variance extracted (AVE). Based on Table 2, it is found that the AVE is above 0.5 for all constructs, namely FS, Emotion, and IB. This means that all constructs

have high discriminant validity because the constructs are indeed different and do not overlap.

The next test is composite reliability. A construct is said to be reliable if the Composite Reliability (CR) value is above 0.7 (Hair Jr et al., 2018) and Cronbach's alpha value is greater than 0.6. Based on Table 2, it is found that the overall composite reliability and Cronbach's alpha are above the required ones, which are greater than 0.70 and greater than 0.60, respectively, so it can be concluded that each construct has high reliability.

The results of the structural model test are listed in Table 3. It shows that all criteria have met the requirements, which means no multicollinearity. Thus, the path analysis model produced in this test meets the value of a good model determination so that the results are worthy of interpretation for hypothesis testing.

The results of these calculations obtained from the model are shown in Figure 2.

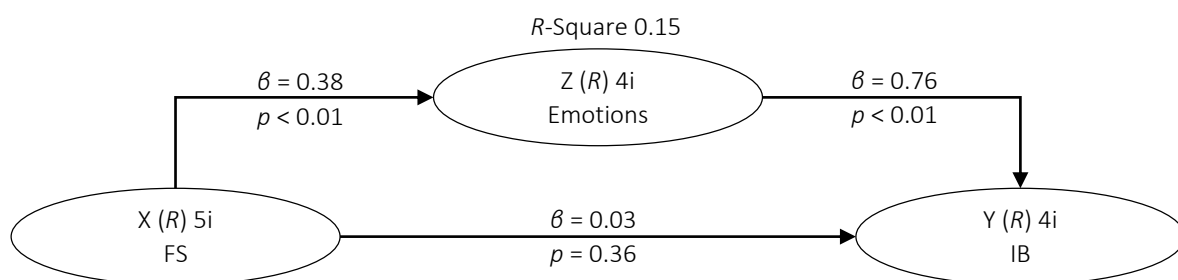


Figure 2. Calculation of beta model test

The inner model test was conducted to measure the overall relationship of the variables. In this study, the overall relationship of these variables uses *R*-square Adjusted (*Adjusted R*²) endogenous variable, namely IB.

Table 4. R-Square and Q-Square

Source: Primary data processed.

Model	R-Square	R-Square Adj.	Q-Square
FS → Emotions	0.147	0.141	0.143
FS and Emotions → IB	0.597	0.591	0.599

Based on Table 4, it is found that the results of testing the effect of the FS variable (X1) on emotions (Z1) have an R-Square value of 0.147 or a coefficient of determination (KD) of 14.7%. On the contrary, the remaining 85.3% contributes from other variables outside analysis. The contribution of the effect of the variable FS (X1) on IB (Y1) is 59.7%. Based on the Q-square's value, the model has a predictive relevance of 14.3%. The results of testing the variables FS (X1) and emotions (Z1) against IB (Y1) have an R-Square value of 0.597 or a coefficient of determination (KD) of 59.7%. While the remaining 40.3% is a contribution from other variables outside this study. The contribution of the effect of the variables FS (X1) and emotions (Z1) on IB (Y1) is 59.1%. Based on the Q-square's value, the model has a predictive relevance of 59.9%. Testing the accuracy of the model (Goodness of Fit) uses the coefficient of determination of the total R-Square of the two equations. Based on the first equation, the R-Square value is 0.162, and from the second equation, the R-Square is 0.618. The following is the accuracy of the model obtained by:

$$\begin{aligned}
 R\text{-Square model} &= 1 - (1 - R\text{-Square}) (1 - R\text{-Square}), \\
 &= 1 - (1 - 0,147) (1 - 0,597), \\
 &= 0,656241 \text{ or approximately } 65.6\%.
 \end{aligned}$$

With the obtained model determination of 65.6%, it means that the contribution of the model to explain the structural relationship of the four variables studied is 65.6%, and the remaining 34.4% are

Table 5. Direct and indirect pathways of effect

Source: Primary data processed.

Relationship between variables	Path Coefficient (β)	P-value	Sig
FS → Emotions (H1)	0.384	<i>p</i> < 0.001	Significant
Emotions → Impulse Buying (H2)	0.761	<i>p</i> < 0.001	Significant
FS → Impulse Buying (H3)	0.029	<i>p</i> = 0.361	Not significant
FS* Emotions → Impulse Buying (H4)	0.292	<i>p</i> < 0.001	Significant

other variables that are not included in the model. Thus, the path analysis model produced in this test meets the value of the moderate model determination because there is a direct effect below 70%. Therefore, this path analysis model is worthy of interpretation for hypothesis testing.

4. DISCUSSION

The results of the first hypothesis test are listed in Table 5. It shows that FS affects consumer emotions ($\beta = 0.384$; $p < 0.001$); thus, *H1* is accepted. This means that consumers have a tendency to act emotionally when the FS in the Shopee application takes place. Testing the second hypothesis also showed a positive and significant relationship ($\beta = 0.761$; $p < 0.001$); *H2* is accepted. That is, when there is an FS program, people who are initially rational become emotional. These consumer emotions become a person's motive for impulsive behavior so that they decide to purchase without planning. While the third hypothesis testing shows contradictory results. In this case, FS does not significantly affect consumer impulse buying ($\beta = 0.029$; $p = 0.361$); thus, *H3* is rejected. This means that FS does not necessarily affect a person's tendency to make impulse purchases. There may be other factors that are more likely to affect consumers' impulse buying when FS takes place. Hypothesis testing shows that FS affects IB through consumer emotions ($\beta = 0.292$; $p < 0.001$), meaning *H4* is accepted. Therefore, consumers have a tendency to act emotionally when the FS in the Shopee application takes place. When FS occurs, it becomes a stimulus to evoke emotions; consumer emotions become the motive for making impulse purchases. This study proves that the emotional variable is a full mediating variable on IB.

Based on Table 5, it can be seen that the results of testing the first hypothesis show that FS (FS) has a positive and significant effect on emotions

with a coefficient value of 0.384 and $p < 0.001 < 0.05$. Therefore, it can be interpreted that FS and emotions directly have a positive and significant relationship. This can be interpreted that sales promotion activities through FS in the form of discounted prices, a limited period, the number of products available, and attractive forms of promotion can bring up consumer emotions such as feelings of pleasure, admiration, fear, and disappointment (Berezina et al., 2016; Kukar-Kinney et al., 2016; Lo et al., 2016; Parsad et al., 2021; Zhang et al., 2021). However, this result contradicts Peng et al. (2019), who explained that the limited time in the FS strategy could not mediate the effect of emotional value on purchase intention on online sales.

The results of testing the second hypothesis show a positive and significant effect between emotions on IB with a coefficient value of 0.761 and $p < 0.001 < 0.05$. Thus, emotions have a direct effect on IB. This can be interpreted as the feeling of pleasure, excitement, fear, and anxiety that can affect consumer behavior in making purchases that are not planned in advance. For example, when consumers feel happy, shopping activities become more enjoyable, so the opportunity to make a purchase suddenly increases (Ozer & Gultekin, 2015). Vice versa: if the mood is bad, consumers usually shop to reduce stress and make them feel better. This study is in line with Amos et al. (2014), Bandyopadhyay et al. (2021), Febrilia and Warokka (2021), and Ozer and Gultekin (2015). Mood, or emotional state, has long been associated with impulse buying (Lucas & Koff, 2017; Rook & Fisher, 1995). When consumers' moods are in a positive state, they emotionally respond to situational stimuli and then engage in impulsive buying behavior. This study contradicts the findings of Šeinauskienė et al. (2015), who state that the emotions shown by the happiness felt by consumers cannot encourage IB. Likewise, Peng et al. (2019) show that the emotional value felt by consumers cannot increase purchase intentions on online sales. Thus, online traders must control external and internal stimuli to increase IB through other platforms (Kimiagari & Asadi Malafe, 2021). Consumers who tend not to control themselves to make unplanned purchases are more likely to be impulsive buyers. They have strong feelings about buying products online and would be very happy

if they could (Febrilia & Warokka, 2021; He et al., 2018). To respond to the behavior of customers who shop in e-commerce, it is necessary to understand the attributes of social commerce well in order to attract more customers. In short, to increase impulse buying online, both the dimensions of website quality and consumer personality traits, should be considered. Such as considering the consumer friendliness factor, it is necessary to provide a website with a platform that allows users to interact with each other to share opinions or experiences (Turkyilmaz et al., 2015).

The results of testing the third hypothesis indicate a positive but not significant effect between FS on IB. This is because the value of $p = 0.361 > 0.05$. This means that sales promotion through FS does not significantly affect someone in making an impulse purchase. The findings of this study do not strengthen Zhang et al. (2018), who explained that FS can encourage consumers to do IB. More specifically, it is stated that FS, by giving significant discounts and short holding times, builds a perception of scarcity of goods and creates a high perception of value for goods; this causes the occurrence of IB.

The results of testing the fourth hypothesis explain that FS has an indirect effect on IB through emotion, with a value of 0.292 and $p < 0.001 < 0.05$. FS indirectly and significantly affects IB by being mediated by emotions. The sales promotion strategy uses discounted prices, a limited period, the number of products available, and attractive promotional forms to increase IB if previously there were consumer emotions in the form of pleasure, admiration, fear, and disappointment with FS activities. The value of consumers' perceptions of prices can affect shopping intentions through emotions. This shows the importance of emotion as a mediator between consumer perceptions of the prices set by a store and consumer responses to make purchases (Zielke, 2014). The results of this paper support the findings of Bandyopadhyay et al. (2021), who state that emotions can mediate FS strategies in encouraging consumers to do IB. However, it is different from the research findings by Peng et al. (2019), who explained that the limited time in the FS strategy could not mediate the effect of emotional value on purchase intention on online sales.

CONCLUSION

Based on the results, several points are revealed for online marketplace sales. First, sales promotion activities through FS in the form of discounted prices, a limited period, the number of products available, and attractive forms of promotion can directly generate consumer emotions. This means that a higher intensity of sales promotion through FS will increase consumer emotions. Meanwhile, consumer emotions can directly lead to IB. This can be interpreted that there is a sense of pleasure when seeing FS activities, intrigued by the form of FS strategies, fear, and anxiety. FS activity time runs out can affect consumer behavior to shop on an IB basis.

This study has several limitations that allow it to be used as material for further studies. First, although the number of samples is sufficient, it can be increased, considering that PLS-SEM will be much more accurate with large samples (e.g., more than 200). Second, all respondents in this study were dominated by women, so the possibility of bias in the results and interpretation, broadening the demographic range can be done to sharpen the analysis and generalize the results of this paper. Third, measuring emotions and IB using a questionnaire can obscure respondents' answers. Future research on the same topic is recommended to use an experimental approach for greater accuracy in measuring emotions and IB. Furthermore, several variables can be explored more deeply, for example, whether IB is more persistent in utilitarian or hedonic products.

AUTHOR CONTRIBUTIONS

Conceptualization: Martaleni Martaleni, Ferdian Hendrasto, Noor Hidayat.

Data curation: Martaleni Martaleni, Ferdian Hendrasto, Ni Nyoman Kerti Yasa.

Formal analysis: Martaleni Martaleni, Ferdian Hendrasto, Noor Hidayat, Amin Alfandy Dzikri, Ni Nyoman Kerti Yasa.

Funding acquisition: Martaleni Martaleni, Ferdian Hendrasto, Noor Hidayat, Amin Alfandy Dzikri, Ni Nyoman Kerti Yasa.

Investigation: Ferdian Hendrasto, Amin Alfandy Dzikri.

Methodology: Martaleni Martaleni, Ferdian Hendrasto, Noor Hidayat, Amin Alfandy Dzikri.

Project administration: Martaleni Martaleni, Noor Hidayat, Ni Nyoman Kerti Yasa.

Resources: Martaleni Martaleni.

Software: Martaleni Martaleni, Amin Alfandy Dzikri.

Supervision: Ferdian Hendrasto, Ni Nyoman Kerti Yasa.

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