

WILL THEY REGRET? KEY DRIVER OF IMPULSIVE BUYING BY MILLENNIAL CUSTOMERS IN E-COMMERCE

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ABSTRACT

Sales promotions conducted in e-commerce can trigger customers to make spontaneous purchases. However, the reaction could lead to an unappealing effect for businesses. This study investigates the effect of impulsive buying from the influence of sales promotion in Shopee e-commerce. A total of 171 Millennial generations in Bali, Indonesia, participated in the questionnaire and were analyzed through PLS-SEM. As a result, it was discovered a negative effect of sales promotion toward post-purchase regret, and a positive effect on both sales promotion on impulsive buying and impulsive buying on post-purchase regret. It was also revealed that impulsive buying serves as a full mediating variable between sales promotions toward post-purchase regret. The findings of this research showed significance to Shopee e-commerce, businesses, specifically marketers, in determining the right sales promotion strategy. This study provides originality by investigating the direct influence between sales promotion toward post-purchase regret and impulsive buying as mediating variables.

Keywords: sales promotion; impulsive buying; post-purchase regret

1.0 INTRODUCTION

The emergence of Corona Virus in December 2019 has spread tremendously to the entire world, making it the fifth pandemic in history. Emerging regulations from the COVID-19 Pandemic eventually affect the economy and society. This leads to extreme changes in how businesses and consumers behave (Donthu & Gustafsson, 2020). The shift in consumer behavior from the COVID-19 Pandemic also includes the shopping style that turned offline to online (Nugroho et al., 2021). Now that consumers are turning to online shopping, company managers must be innovative to increase the interest of consumers. This makes online shopping becomes a necessary instrument worldwide, especially amid the COVID-19 Pandemic.

In Bali, Indonesia, data were taken from the Survey of COVID-19 Impact on the Social Demographic and Business Actors in Bali Province from the Central Bureau of Statistics in Bali Province (Badan Pusat Statistika Provinsi Bali, 2020) stated that despite living in a middle of a pandemic, 52.46% of respondents experienced an increase in spending. Online shopping activity is also increased for 23.4% of respondents from the same survey. With millennial generation has the highest proportion of increased online shopping activity compared to Gen Z, Gen X, and Baby Boomers.

Millennials have many synonymous terms including digital natives, Generation Y, and the "net" generation (Judd, 2018). Their whole lives have been surrounded by the internet since they were born, thus called digital natives (Helsper & Eynon, 2010). This implies that this generation is inherently tech-savvy and that they think and behave differently because of their use of technology. As savvy internet users, Millennials are familiar with online shopping making them have a positive attitude that leads to a purchase intention (Dharmesti et al., 2021). This is also supported by a Consumer Culture Report from 5WPR that reveals Millennials as the biggest generation most likely to make online purchases (5WPR, 2020); (Subawa, et.al., 2021).

Nowadays, online purchases can be easily done anywhere, anytime, and take less effort than traditional purchases. Companies, therefore, are aware that they need to maximize their best promotion to attract more customers. One kind of promotion to reach more audience is sales promotion. If the sales promotion is well-planned and effective, it can provoke consumers' buying intention. Sales promotion is designed to trigger consumers in purchasing products or services in a limited time (Kotler et al., 2006). Nevertheless, sales promotion is the cause of online impulse purchases (Akram et al., 2018).

Impulsive buying or a spontaneous buying decision in purchasing goods is becoming more relevant to this day due to the severity of COVID-19 and the boredom of life's experience (Deng et al., 2020). The generation that has the highest percentage of impulsive buying is the millennials. These youth with student status are more likely to be impulsive and spontaneous, making them not have much consideration before making a purchase (Febrilia & Warokka, 2021; Olivia, 2019). In addition, according to 5WPR (2020), 82% of millennials will purchase goods the first time they see them and if they like them enough. This implies that this generation has more tendency to do impulsive purchases than the other generation.

When an individual is making a purchase, they will evaluate and determine whether or not they are pleased or satisfied with the product that has been purchased (Secapramana et al., 2021). The evaluation can arise a post-purchase emotion such as regret. Post-purchase regret is described as consumers' uncomfortable feelings regarding their previous act or belief and tends to emerge as a conflict of thought that leads to consumers changing their behavior and attitude (Lazim et al., 2020).

Post-purchase regret can be caused by a discount on products and price awareness by consumers. This is supported by M'Barek & Gharbi (2011), which stated that high prices of goods nurture the feeling of regret. Meanwhile, through a discount strategy, the company can maximize sales and, if not done properly, can cause regret to consumers. It is also stated that the price consciousness of consumers affects customer regret, which implies that price relates to regret.

This research investigates the phenomenon in the online context of consumer behavior. Especially with the pandemic situation, where people are urged to stay at home, making channels for online purchases are increasing and developing. One example of an online purchase channel is e-commerce. E-commerce grasps a similar concept to traditional markets that provide places for buyers and sellers to meet. However, e-commerce is a computerized version as a result of network assistance that lets sellers and buyers obtain updated

information and services efficiently (Subawa & Mimaki, 2019). Purchase intention toward e-commerce is increasing because it is perceived as more healthy and safe, unlike traditional retailers (Tran, 2021).

The trend for shopping in e-commerce in Indonesia is proven by data taken from a report conducted by Google, Temasek, Bain & Company (2020) that shows Indonesia as the largest e-commerce market in Southeast Asia with a gross market value of US\$ 32 billion. The number is forecasted to increase to US\$ 83 billion by 2025. The increasing use of e-commerce is essential for both developed and developing countries to carry economic and strength development, which in return strengthens their competitiveness and productivity (Subawa et al., 2020).

One of the highest visitors of e-commerce in Indonesia is Shopee. The platform consistently reached the first place of highest visitors in 2020 during the 1st-4th Quartal with the highest reach of 129.3 million visitors (iPrice Insights, 2021). However, in the 1st quartal of 2021, another competitive e-commerce, Tokopedia, replaced Shopee in the first place and obtained 147.790.000 visitors. Shopee followed with 126.996.700 visitors. Besides, Shopee's customer satisfaction level is lower compared to Tokopedia. According to a study conducted by Jakpat (2021), Shopee's satisfaction level is at level 4.38 on a scale of 1-5. Meanwhile, Tokopedia's satisfaction level is higher at 4.41. From that explanation, this research will continue using Shopee to determine the impact of sales promotion on impulsive buying and eventually know the after-effect of the purchase.

This study was conducted by the was a motivation from previous research conducted by Akram et al. (2018) that stated sales promotion significantly influences online impulsive buying behavior. The research gap was on Akram's study which only focused on China so it could emerge a difference in Bali, Indonesia. Another research gap was found from Kumar et al. (2020) that only study the influence of impulse buying and post-purchase regret in Bhubaneswar and Cuttack, India, in the context of grocery products. Therefore, the current research would continue in Indonesia's e-commerce, Shopee, and not focus on one kind of specific product.

The need for studying the after-effect of impulsive buying is because there is a possibility it might lead to several negative outcomes and unfavorable future behavior of consumers toward a brand, such as complaining behavior and not making any repurchase intention. In regards to sales promotion and post-purchase regret also need to be explored more due to the previous study that said price consciousness of consumers and the price of a product is related to regret. However, to the best of the author's knowledge, there is still a lack of previous studies on the direct influence between sales promotion to post-purchase. Thus, the relation is investigated more in this research.

2.0 LITERATURE REVIEW

2.1 Sales Promotion

Sales promotion is a part of the promotional mix, which consists of personal selling advertisements, public relations, and direct sales. The promotion used by businesses to achieve advertising and marketing objectives. As a part of the promotional mix, sales

promotion involves marketing activities to add product value in a short period of time to trigger consumers in making a purchase decision (Genchev & Todorova, 2017). From a company's perspective, the concept of sales promotion is used as an initiative to increase sales, usage, or trial of a product or service (Ramesh & Rao, 2018).

There are different tools of sales promotion such as (1) Sample is a small number of products offered for consumers to try, (2) Coupon in which gives buyers a discount on the purchase of certain products, (3) Refund is an offer to repay part of the purchase price of a product to a consumer who sends a "proof of purchase" to the company, (4) Price packages (discounted transactions) is offers given for consumers to save from the regular price of a product, (5) Premium (gift giving) is goods given away for free or at very low prices to entice consumer to purchase a product, (6) Contests, sweepstakes and games are promotional activities that give consumers the opportunity to win prizes such as cash, promotion or goods either by extra effort or luck, (7) Subscription rewards is a cash or other gifts offered for the use of a company's products or services, (8) Free testing by inviting potential buyers to test the product at no cost in the hope that they will buy, (9) Product warranty is the seller's explicit or implicit promise that the product will work as specified (Kotler et al., 2006).

Kotler & Keller (2012) also stated five different indicators that form a sales promotion, such as (1) Promotion frequency is the number of quantity sales promotions executed over a period of time through channel or media, (2) Promotion quality is a measure of how excellent sales promotions are presented, (3) Promotion quantity is the value or amount of sales promotion given to consumers, (4) Promotion time is the length of promotion carried out by the business, and (5) Accuracy or suitability of promotional targets is how the promotion fulfill and suit the company's desired goals.

2.2 Impulsive Buying

Impulsive buying can be associated with unplanned purchases. It occurs when people feel compelled to purchase goods with no conscious consideration of why and for what reasons they need the product (Verhagen & van Dolen, 2011). Iyer et al. (2020) considered impulsive buying as a negative dimension of consumption, including irrational money spending, impractical purchases, and bearing risks of purchase. Impulsive buying emerges as a stimulus response due to an unintended and unreflective desire to purchase particular goods or brands (Chan et al., 2017). Usually, before impulsive purchases are made, a feeling of doubt emerges in consumers about whether to purchase or not. Nevertheless, due to the spontaneity of impulsive buying, the doubt becomes a fleeting thought that ended up not being paid attention to (Pradipto et al., 2016).

The indicator that is used in this research is according to Rook & Fisher (1995) and Verplanken & Herabadi (2001), with a total of five indicators of Impulsive Buying. Those indicators consist of (1) Spontaneity as the need to purchase goods that are unexpectedly not planned due to the sudden desire caused by visual of product, promotion, or sometimes not affected by anything, (2) Compulsion and intensity power as the trigger from an internal factor of consumer due to the sudden urge to purchase and the tendency to buy something to satisfy oneself, (3) Excitement and stimulation is the sudden desire of consumers to buy products that are obtained from exciting, thrilling, and wild feeling, (4) Indifference to the

consequences is the strong urge that comes from within in purchasing goods are unbearable, thus making them not think about the negative impact even though having full awareness regarding the risk involved, (5) Not Making Comparison is the act of not comparing the product to be purchased with products that may be more useful. Unlike the other indicators, the last indicator of impulsive buying was taken from Verplanken & Herabadi (2001).

2.3 Post-Purchase Regret

After an individual purchase product, the buying process does not stop there. Consumers oftentimes evaluate the product they bought whether it is in accordance with their purchasing purpose and suits their needs (Hawkins & Mothersbaugh, 2016). Suppose the consumer experiences a painful feeling from making the wrong decision. The feeling arises after comparing the current and alternative conditions that are supposed to happen from the different decisions. In that case, it can be called post-purchase regret (Cooke et al., 2001).

According to Zeelenberg & Pieters (2007), regret is a cognitive emotion that individuals tend to suppress, avoid, refuse, and regulate when experiencing one. In terms of post-purchase, the feeling of regret is a painful emotion that emerges when individuals make an inappropriate comparison between expectations and the results obtained after buying and using a product (Lee & Cotte, 2009). The same thing was revealed by Kumar et al. (2020), post-purchase regret is caused by the gap between the expected condition of goods and its reality against the exchange of money. It is also stated that the post-purchase phase of impulse buying leads to a return of goods, financial problems, frustration, dissatisfaction, guilt, and reluctance to purchase. In making a purchase, consumers that are impulsively purchasing goods or services will tend to feel post-purchase regret, caused by the lack of awareness and consideration before determining to make a purchase (Secapramana et al., 2021; Hoch & Loewenstein, 1991). The component or indicators that are used for post-purchase regret in this research are taken from Lee & Cotte (2009) and consist of:

(1) Outcome regret

- Regret due to Foregone Alternatives

When experiencing regret caused by foregone alternatives, consumers feel regret because they have chosen one alternative over the other. When the alternative chosen by the individual is considered to be less good than other alternatives, the individual can be said to experience regress due to prior alternatives with choices and terms.

- Regret due to a Change in Significance

It appears because the product is no longer perceived as useful from the time of purchase until the point afterward. This is because individuals tend to view a product based on the product's ability to meet the expected consequences.

(2) Process Regret

- Regret Due to Under-Consideration

When an individual feels regrets due to lack of consideration, it doubts the process that led them to make a purchase. Thus, there are two ways in which one can feel remorse for lack of consideration. First, individuals will feel regret if they feel they have failed to implement the decision process they have planned. Second, individuals will regret if they lack the information needed to make a good decision.

- Regret Due to Over-Consideration

Apart from the absence of information, too much information can also cause a person to feel regret. That is what is called feeling regret because there are too many considerations. Therefore, spend a lot of time and effort in the buying process. When people take too much into account in the decision process, they regret receiving unnecessary information that may or may not affect the final outcome.

3.0 THEORETICAL FRAMEWORK

Figure 1 presents a proposed model of hypothesized relationships among Sales Promotion, Impulsive Buying, and Post-Purchase Regret.

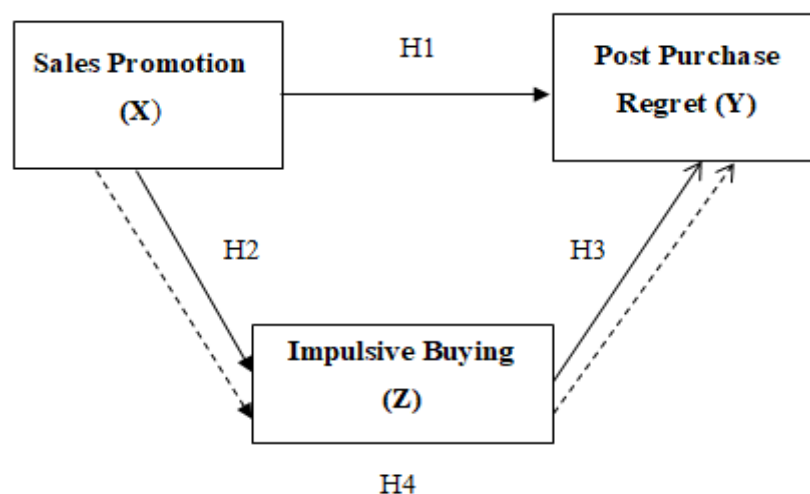


Figure 1. Research Framework

4.0 RESEARCH HYPOTHESIS

4.1 Sales Promotion on Post-Purchase Regret

The supporting study will include price consciousness and product price, which are related to sales promotion. The first study by Cornish (2020) shows that the price consciousness of consumers has a positive impact on purchase regret. The second study conducted by M'Barek & Gharbi (2011) stated that high prices boost the feeling of regret. Additional previous findings from Akbar et al. (2020) reveal sales promotion is positively associated with post-purchase dissonance. However, to the best of the author's knowledge, there is still a lack of previous research conducting sales promotions toward post-purchase regret. Therefore, the hypothesis that can emerge is:

H1: Sales promotion has a significant positive effect on post-purchase regret.

4.2 Sales Promotion on Impulsive Buying

A previous study from Akram et al. (2018) reveals that sales promotion significantly influences online impulsive buying behavior. Another study by Miao et al. (2019) shows a result that sales promotion significantly affects the behavior of impulsive buying. In addition, a study from Ismail & Siddiqui (2019) shows that sales promotion has a positive impact on consumers' impulse purchases. From the previous study, it emerges a hypothesis for this research, which is:

H2: Sales promotion has a significant positive effect on impulsive buying.

4.3 Impulsive Buying on Post-Purchase Regrets

Previous research from Lazim et al., (2020) shows that impulse buying positively influences post-purchase regret, especially in the online situation. In a brick-and-mortar setting, this is supported by a study from Parsad et al. (2019) that proved impulsive purchase was significant and positively linked to the feeling of regret through lights and music. Kumar et al. (2020) also show that post-purchase regret and impulsive buying have a positive relationship for low-involvement products. Based on these previous studies, the hypothesis clarified for this research is:

H3: Impulsive buying has a significant positive effect on post-purchase regret.

4.4 Impulsive buying mediates sales promotion on post-purchase regrets

A study by Akbar et al. (2020) reveals that impulse buying behavior has a role as mediating variable in the relationship between sales promotion that acts as the predictor variable and post-purchase cognitive dissonance as the dependent variable. Post-purchase cognitive dissonance is associated with regret, anxiety, and doubt which is a part of a psychologically uncomfortable state (Mowen & Minor, 1998). A second study by Lazim et al. (2020) argues that sales promotion significantly influenced impulse buying, while impulse buying behavior positively encourage post-purchase regret and was moderated by materialism. At last, supporting studies in the previous hypothesis have stated the result of a significant effect between sales promotion on impulsive buying and impulsive buying on post-purchase regret. The above result from previous research suggests that impulse buying behavior may have a mediating effect between sales promotion and post-purchase regret. Thus, there is an assumption that impulsive buying might act as a mediating variable. Therefore, the proposed hypothesis for the mediating variable is:

H4: Impulsive buying has a significant effect on mediating sales promotion and post-purchase regrets.

5.0 RESEARCH METHODOLOGY

5.1 Sampling and Data Collection

The data obtained in this research is a result of dissemination that has been carried out to the sample through a purposive sampling technique. The criteria for the respondent include the

Millennial generation (20-39 years old) domiciled in Bali, have made a purchase during sales promotion in Shopee, and must answer in a total of 33 questions regarding sales promotion, impulsive buying, and post-purchase regret. The data collection was conducted for a week distributed digitally through google Forms and reached a total of 171 respondents. The measurement of questionnaire statements is using 5-point Likert's scale: (1) SD = Strongly Disagree, (2) D = Disagree, (3) N = Neither Disagree nor Agree, (4) A = Agree, (5) SA = Strongly Agree.

5.2 Data Analysis

5.2.1 Respondents' Demographic Profile

The respondents' demographic characteristic is provided in table 1, that out of 171 respondents, 71.9% were dominated by a female. Meanwhile, male respondents were of less percentage of 28.1%. Followed by 20-24 years old comprised 91.22% of respondents, 25-29 years were 7.02%, 30-34 years were 1.16%, and the least dominant age range is 35-39 years only making up 0.6% of respondents. However, all of these age ranges from 20-39 years old are still considered the millennial generation. In terms of Domicile, the respondents came from different areas in Bali. The area in Bali with the largest number of respondents is Denpasar City with 55.6% —followed by Badung Regency with 26.3% respondents. Gianyar has 7%, Tabanan has 5.8%, Buleleng has 2.3%, and Karangasem has 1.2% of the total respondents. The least dominated respondents come from Bangli, Jembrana, and Klungkung's regencies, which only make up 0.6% of the total research respondents, respectively. The lack of respondents in Bangli, Jembrana, and Klungkung is due to the uneven spread of internet users in the area. Only 45.39% of people in Bangli, 50.60% of people in Jembrana, and 53.37% of people in Klungkung have access to the internet as of June 21, 2021. Compared Denpasar and Badung have a high percentage of internet users with 81.55% and 72.91% of the total population (Badan Pusat Statistika Provinsi Bali, 2021).

In the field of education level, this research was dominated by Senior High School graduates with 72.5% of respondents. 0.6% were in junior high school, 14% were bachelor's degrees 10.5% were diplomas, and 1.8% had master's degrees. Furthermore, the occupational respondents showed the percentage of Students, Entrepreneurs, Private Employees, and others were 73.1%, 20.9%, 11.1%, and 12.9% respectively. It was also found that the respondents came from different income backgrounds. The dominant respondent in this research tends not to have income with 56.7% of respondents. Then, those with Rp1.500.000 income have the second-largest respondent with 18.7%. Followed with those with Rp1.500.000, - until < Rp3.000.000 income was 17.5%. The least dominant respondent has the income range of Rp3.000.000 until < Rp4.500.000 and more than Rp4.500.000 with 6.4% and 0.6% respondents respectively.

Table 1. Respondents' Demographic Profile

Profile	Characteristic	Frequency	Percent
Gender	Male	123	28.1
	Female	49	71.9
Age Range	20-24	156	91.22
	25-29	12	7.02
	30-34	2	1.16

	35-39	1	0.6
Domicile	Denpasar City	96	55.6
	Badung Regency	45	26.3
	Gianyar Regency	12	7
	Tabanan Regency	10	5.8
	Buleleng Regency	4	2.3
	Karangasem Regency	2	1.2
	Bangli Regency	1	0.6
	Jembrana Regency	1	0.6
	Klungkung Regency	1	0.6
	Educational Qualification	Junior High School	1
Senior High School		125	72.5
Diploma		18	10.5
Bachelor Degree		24	14
Master Degree		3	1.8
Others		1	0.6
Occupation	Students	126	73.1
	Entrepreneur	5	20.9
	Private Employees	19	11.1
	Others	22	12.9
Monthly Income	Does not have income yet	98	56.7
	< Rp. 1.500.000, -	32	18.7
	Rp. 1.500.000,- until < Rp. 3.000.000,-	30	17.5
	Rp. 3.000.000,- until < Rp. 4.500.000,-	11	6.4
	≥ Rp. 4.500.000,-	1	0.6
Source: Primary Data Processed, 2021			

5.3 Data Analysis Procedure

This research was analyzed using smart-PLS Version 3.0. The use of PLS is considered a variance-based technique to SEM and it does not make any assumptions in regard to data distribution (Hair et al., 2019).

5.4 Outer Model Testing

(1) Convergent Validity

In this study, convergent validity was concerned with using factor loadings and Average Variance Extracted (AVE). Table 2 provided the value of each indicator and since all the constructs had a correlation greater than 0.7 (> 0.7), the outer loadings were established. In addition, Table 3 shows that the AVE value of each variable is above the expected value, which is above 0.5 (Hair et al., 2019). This implies that the indicator used in this study has fulfilled the convergence validity.

Table 2. Outer Loading Factor of Indicators

	Impulsive Buying	Post Purchase Regret	Sales Promotion
IB1	0,901		
IB2	0,710		
IB3	0,769		
IB4	0,891		
IB5	0,702		
IB6	0,745		
IB7	0,741		
IB8	0,790		
IB9	0,812		
IB10	0,717		
IB11	0,718		
IB12	0,886		
IB13	0,792		
PR1		0,713	
PR2		0,742	
PR3		0,777	
PR4		0,790	
PR5		0,804	
PR6		0,774	
PR7		0,767	
PR8		0,792	
PR9		0,758	
PR10		0,831	
SP1			0,903
SP2			0,918
SP3			0,915
SP4			0,934
SP5			0,878
SP6			0,792
SP7			0,880
SP8			0,922
SP9			0,767
SP10			0,731

Source: Primary Data Processed, 2021

(2) Discriminant Validity

In discovering a good discriminant validity of the research, two stages must be carried out, which consist of cross-loading and Fornell's-Larcker Criteria. From the result given in table 3, it can be concluded that all indicators in this research have a greater correlation coefficient with each construct compared to the indicator correlation coefficient value in the constructing block in the other column. Implying that the cross-loading result of this research is valid.

Table 3. Cross Loadings

	Impulsive Buying	Post Purchase Regret	Sales Promotion
IB1	0,901	0,246	0,446
IB2	0,710	0,212	0,381
IB3	0,769	0,298	0,324
IB4	0,891	0,261	0,421
IB5	0,702	0,181	0,339

IB6	0,745	0,249	0,488
IB7	0,741	0,050	0,677
IB8	0,790	0,207	0,554
IB9	0,812	0,328	0,424
IB10	0,717	0,353	0,376
IB11	0,718	0,101	0,491
IB12	0,886	0,240	0,425
IB13	0,792	0,251	0,449
PR1	0,175	0,713	-0,023
PR2	0,132	0,742	-0,086
PR3	0,188	0,777	-0,006
PR4	0,179	0,790	-0,049
PR5	0,117	0,804	-0,096
PR6	0,132	0,774	-0,094
PR7	0,374	0,767	0,028
PR8	0,292	0,792	0,011
PR9	0,234	0,758	0,056
PR10	0,241	0,831	0,028
SP1	0,483	-0,079	0,903
SP2	0,495	-0,028	0,918
SP3	0,487	-0,057	0,915
SP4	0,539	-0,014	0,934
SP5	0,449	0,055	0,878
SP6	0,560	-0,056	0,792
SP7	0,473	0,017	0,880
SP8	0,508	0,036	0,922
SP9	0,469	-0,066	0,767
SP10	0,533	0,016	0,731

Source: Primary Data Processed, 2021

Table 4 depicted the result of the Fornell-Larcker criterion that all variables have a high value compared to other variables in the same column. Therefore, the data model tested in this study has matched to the requirements of discriminant validity.

Table 4. Fornell-Larcker Criterion

	Impulsive Buying	Post Purchase Regret	Sales Promotion
Impulsive Buying	0,786		
Post Purchase Regret	0,288	0,776	
Sales Promotion	0,582	-0,021	0,867

Source: Primary Data Processed, 2021

(3) Composite Reliability

The specific composite reliability value in this research has reliable or internal consistency reliability because the value is more than 0.70. It can be seen in the Table 5 below as follows:

Table 5. Composite Reliability

	Composite Reliability
Impulsive Buying	0,954
Post Purchase Regret	0,938
Sales Promotion	0,968
Source: Primary Data Processed, 2021	

The next stage conducted is Cronbach’s alpha to strengthen the composite reliability. Table 6 reveals that Cronbach’s alpha value for each variable is more than 0.7, indicating that each variable's consistency is good and dependable.

Table 6. Cronbach Alpha

	Cronbach's Alpha
Impulsive Buying	0,948
Post Purchase Regret	0,927
Sales Promotion	0,962
Source: Primary Data Processed, 2021	

5.5 Inner Model Testing

Structural model Testing (Inner Model) was tested to predict causality between latent variables. Evaluating the inner model with Partial Least Square begins by looking at the R-square for each latent dependent variable. In this study, the R-square results are shown in the table below:

Table 7. R-Square

	R Square
Impulsive Buying	0,338
Post Purchase Regret	0,137
Source: Primary Data Processed, 2021	

From the above table, it was observed that the variable sales promotion was not listed. It was because the variable did not have a coefficient of determination R², considering that the variable was not explained by other variables in this study. The R-square value of the impulse buying variable is 0.338, which means 33.8% of this variable was explained by the sales promotion variable and the remaining 66.2% was explained by other variables that are not studied in this research. The post-purchase regret variable has an R-square value of 0.137 which means 13.7% of this variable is explained by impulse buying and post-purchase regret. Meanwhile, the remaining 86.3% is explained by other variables not examined in this study.

In addition to the R-square test, the Q-square predictive relevance test is used in this work to assess how effectively the model and its parameter estimations create the observed values. The model is predictively relevant if the Q-square value is greater than zero; on the other hand, if the value is zero, the model is not predictively relevant (Hair et al., 2014). The formula for calculating the Q-Square is:

$$Q2 = 1 - (1 - R12) (1 - R22) (1 - R32)$$

$$Q2 = 1 - (1-0.338) (1-0.137)$$

$$Q2 = 1 - (0.662) (0.863)$$

$$Q2 = 0.909306$$

From the calculation of Q2 predictive relevance, it can be explained that the research model has a value above 0 which is 0.909306 or 90%. These results mean that the research model is in a good category because it has a relevant predictive value of 90%.

5.6 Hypothesis Testing

The basis used in hypothesis testing is the value contained in the result of path coefficients. In the Partial Least Square (PLS), the hypothesized relationship was statistically tested using simulation. In this case, a bootstrap calculation was done on the sample. The criteria for acceptance or rejection of the hypothesis are that if the t-statistic is greater than (>) 1.96, the hypothesis is significant. The value of 1.96 is considered insignificant. In addition, if the p-values are smaller than α (0.05), the hypothesis is significant, if greater than 0.05, it is considered not significant.

In order to know the positive or negative influence, the value of path coefficients must be tested. H1 is not supported with the p-value of 0.007, t-statistic of 2.729, which shows a significant and negative effect with the value of path coefficients, -0.285. H2 was supported with a p-value was 0.000, a t-statistics analysis value of 12.091, and a positive result in path coefficients in the amount of 0.582. H3 was supported with a p-value of 0.000; t-statistics show the value of 5.548, shown to be significant, and a positive result of path coefficients in the amount of 0.454. At last, H4 was supported as well with the p-value of 0.000; t-statistic shows the value of 4.585, implying to have a significant and positive result with path coefficients value showing a number of 0.264.

In regard to mediating variables, the role of impulsive buying as a mediation obtains a VAF value of 0.244 or 92.6%. If the VAF (Variance Accounted for) value is greater than 80% (> 80%), it can be determined that the mediating variable is full mediation. Impulsive buying as a full mediation variable means that the effect of the sales promotion (X) to post-purchase regret (Y) is completely transmitted with the help of impulsive buying (Z).

Table 8. Bootstrap Output – Total Direct Effect

		Original Sample (O)	T Statistics (O/STDEV)	P Values
H1	Sales Promotion (X) -> Post Purchase Regret (Y)	-0,285	2,729	0,007
H2	Sales Promotion -> Impulsive Buying (Z)	0,582	12,091	0,000
H3	Impulsive Buying (Z) -> Post Purchase Regret (Y)	0,454	5,548	0,000

Sources : Primary Data Processed, 2021

Table 9. Bootstrap Output – Specified Indirect Effects

		Original Sample (O)	T Statistics (O/STDEV)	P Values
H4	Sales Promotion (X) -> Impulsive Buying (Y) -> Post Purchase Regret (Z)	0,264	4,585	0,000
Sources: Primary Data Processed, 2021				

Table 10. Total Direct Effects and VAF Calculation

	Original Sample (O)	T Statistics (O/STDEV)	P Values
Sales Promotion (X) -> Post Purchase Regret (Y)	-0,285	2,729	0,007
VAF Value of Impulsive Buying			
Indirect Effects / Total Effects	0.264 / 0.285 = 0.926 = 92.6%		
Sources: Primary Data Processed, 2021			

6.0 DISCUSSION

(1) Sales Promotion toward Post-Purchase Regret

This research revealed that there was a significant negative effect of sales promotion toward post-purchase regret. This result was also supported by previous research from Armstrong et al. (2017), which revealed that the price of a product significantly impacts post-purchase regret. Indicating that during sales promotion, lower price offers from Shopee is influencing post-purchase regret. Another supporting research from Akbar et al., (2020) revealed that there was a significant relationship between sales promotion and post-purchase cognitive dissonance. However, despite the significant effect in both previous studies, it also reveals a positive relationship between the variables. This makes the findings in this study fail to confirm the results of previous studies, which have proven that there is a positive relationship between sales promotion and post-purchase regret (H1 not supported).

The result was also supported by the respondents' characteristics that had filled the questionnaire. Almost 75.6% of respondents had not obtained monthly income and obtained income smaller than (<) Rp1.500.000. An individual with a lower income when planning to purchase during a sales promotion might not feel regret. This suggests that the customers who were regret sales promotion because it was not mediated by impulsive buying. Assuming that the purchase during sales promotion was a planned purchase.

Teck Weng & Cyril de Run (2013) examined in regards of sales promotion in it reveals that the more sales promotion given to customers, the higher satisfaction experienced by customers in the setting of Malaysia. The findings suggest that Malaysia's cultural characteristic of collectivism that support the positive result between sales promotion and satisfaction. Compare to this study, Indonesia has also been shown to have a collectivist culture (Indartoyo et al., (2020). Both the previous study did not use impulsive buying as

mediating effect; it could strengthen the argument that sales promotion has a negative effect on post-purchase regret. Thus, it suggests a similar result of this study.

The negative effect in the result implies that the higher level of sales promotion means that less post-purchase regret emerges from a customer. This is based on the reason that impulsive buying acts as a full mediation variable, meaning that sales promotion and post-purchase regret cannot develop on their own without mediating variables. This is understandable because consumers are more likely to minimize regrets by choosing the promoted product they have planned before therefore rejoicing after the selection (Spears, 2006).

(2) Sales Promotion toward Impulsive Buying

The result showed that sales promotion and impulsive buying show a significant positive effect (H2 supported). The finding confirmed the previous research from Akram et al. (2018). Akram's study focused on an online shopping behavior context in terms of China's e-commerce B2C Internet Market. In other words, both Akram's and the current study was also focusing on consumer behavior in e-commerce. Another study by Zhao et al. (2021) revealed that sales promotion, as a marketing stimulus, and online impulsive buying have a significant, positive relationship, especially on e-commerce websites. Similar findings were demonstrated by Hasim et al. (2018) in the setting of a store websites. For comparison, the previous study that was conducted in Indonesia as well shows a similar result that confirm sales promotion affected consumers to do impulsive buying in rival e-commerce, Tokopedia (Firdausy & Fernanda, 2021). The result of this hypothesis was understandable because sales promotion creates a sense of urgency for customers to purchase the product at a lower price. Especially in an online context where the possibilities for multisensory stimulation are limited and sales promotion offers to grab consumers' attention more easily (Kacen, 2003).

(3) Impulsive Buying Toward Post-Purchase Regret

In regards of impulsive buying toward post-purchase regret, this study showed a significant positive relation, similar to the results of prior research by Kacen (2003). The study examined a positive relation between impulse buying and post-purchase regret in an online context. However, the study did not conduct on e-commerce only but also included shopping websites. Lim et al. (2017), find that e-impulsive buying behavior positively influence regret in the setting of online shopping behavior under e-commerce context. The finding was understandable because impulsive buying is an unplanned purchase customer did with no second thoughts, especially in an online context where consumers could access a wide choice of products. Eventually, when perceived product performance fails to meet expectations, customers are unsatisfied, which leads to dissonance, as stated by Lazim et al. (2020). Furthermore, consumers who purchase impulsively online are more likely to regret their purchases because they cannot ensure the original condition of things before they buy, as well as the provision of relevant information, product condition, and acceptable good services to consumers (Powers & Jack, 2013).

(4) Sales Promotion to Post-Purchase Regret Mediated by Impulsive Buying

Last, with regards to the mediating effect of impulsive buying, it was found that sales promotion had a significant positive indirect effect on post-purchase regret (H4 supported). It

was consistent with a previous study by Akbar et al. (2020) that stated impulse buying behavior is a necessary factor (full mediating variable) in post-purchase cognitive dissonance after the purchase during a sales promotion. Dissonance is also associated with regret, anxiety, and doubt (Mowen & Minor, 1998). The result is affirmed by Telci et al. (2011) stated that individuals who made an online impulsive purchase tend to encounter post-purchase dissonance caused by the anxiety from post-purchase of possible unpredicted results. The result was understandable because, during the consumer purchase decision-making process, either before or after the purchase, they tend to take the initiative to minimize the regret effect (Zhou & Gu, 2015).

6.1 Limitations and Future Research

There are several limitations of this study that should be taken into consideration. Therefore, future researchers who want to continue this research should consider the following suggestions. First, there are several factors that are thought to affect post-purchase regret mediated by impulsive buying but have not been included by researchers. Thus, another use of variables is encouraged, such as emotional brand attachment and product involvement. Through brand attachment, businesses can touch the consumer's emotional side, increasing the likelihood of the consumer purchasing goods produced by the brand. The types of products that businesses sell also play a part in impulsive buying behavior. The first type includes high-involvement product that commonly takes great consideration in purchasing and often involve major purchase. The second type is low-involvement products that are usually bought frequently and have a small effect on an individual's lifestyle.

Second, further research can consider another dependent variable involving any other emotion besides regret, such as pleasure. By adding another emotion, a comparison can be seen between regret and other emotions derived from sales promotion. Third, the questionnaire of this study obtained 171 respondents that are dominated by females as much as 71.9%. Meanwhile, the male respondent contributes 28.1% of the total respondents. This might be perceived as a limitation due to the biased respondent. However, women have more tendency to do online shopping in Shopee compared to males (Populix, 2020) and this validates our findings. Fourth, the current study is conducted quantitatively, only measuring the research construct. Therefore, further research can conduct research using this model with qualitative methods to enhance an in-depth understanding. At last, it is essential to note that consumer behavior has different characteristics. As the subject of this research is Millennials living in Bali, Indonesia, different results might appear in different age ranges and places due to the different demographic characteristics. Further research can expand the age range and use another location to reach a more varied result.

6.2 Managerial Implications

The managerial implications of this research bring significance for management in businesses, especially marketers. They must be more concerned about the customers' post-purchase reaction. The relation between sales promotion toward impulsive buying indicates that marketers must expose the sales promotion to attract more customers. The limited amount of time during sales promotion is an opportunity for businesses to encourage customers to make spontaneous purchases, leading to a significant amount of profit for

businesses (Danish Habib & Qayyum, 2018); (Widhiasthini et.al., 2021). The strategy marketers in e-commerce should consider cross-selling strategy that triggered buyers to buy complementary and related goods. Eventually leads to an increasing number of goods sold.

However, it must be well thought out if businesses hope to increase customers' impulsive buying because it is related to post-purchase regret. The finding of impulsive buying on post-purchase regret is related to the intention of returning goods and complaining behavior (Lim et al., 2017). The behavior eventually harms the brand due to the dissatisfaction of buyers (Sarwar et al., 2020; Shim et al., 2002). Returning goods is not beneficial for both seller and buyer when they are the ones who pay for the delivery. Therefore, marketers must make strategies to not take advantage of consumers' impulsiveness in the short run and create customer relationship management. By maintaining customer relationship management, businesses can achieve and sustain competitive advantages (Wang et al., 2004). In other words, instead of focusing on increasing sales, relationship building with customers must be maintained for a longer-term effect.

It is also revealed that consumers who purchase goods impulsively during sales promotion experience post-purchase regret. This is justified by impulsive buyers who tend to have a hedonic value (Lim et al., 2017). This tendency prompts buyers to spend on e-commerce and makes no effort to gather information. Thus, leaving them a feeling of regret. To prevent this, through sales promotion marketers must communicate and inform what they can offer to the consumers (Jobber & Lancaster, 2006). What marketers can do is prepare quality customer services that touch the emotional side of customers by maximizing their brand. Creating a strong brand presence can also develop solutions to alleviate the guilt and feelings linked with purchase regret (Zurawicki & Braidot, 2005).

Eventually, both seller and Shopee management must focus on the produced product. Sellers make high-quality products even during sales promotion programs so that when consumers have impulse purchases, they will not regret purchasing them. In addition, the significance for Shopee is always to make sure whether the seller produces worth-selling products.

7.0 CONCLUSION

In terms of online consumer behavior, this study reveals that a direct effect of sales promotion conducted in Shopee e-commerce has a significant negative effect on post-purchase regret. Then, provided evidence of a positive association between sales promotion on impulsive buying and impulsive buying on post-purchase regret. Furthermore, the mediating role of impulsive buying is tested between sales promotion and post-purchase regret.

The negative influence of sales promotion and post-purchase regret implies that it might be because customers already planned and think thoroughly the purchase during sales promotion. Therefore, the feeling of regret does not occur. It is also necessary to note that impulsive buying act as a vital factor (full mediation) that influence post-purchase regret during sales promotion in Shopee e-commerce. Making sales promotion and post-purchase regret has a negative influence.

The academic suggestion for further research is that the use of another emotion to investigate, broader the age range, broader the respondent's diversity and setting of the study add a more independent variable, and use a qualitative method. The managerial implications would be necessary for marketers to expose the sales promotion to attract more customers, and increase impulsive buying but to prevent the feeling of regret. Therefore, thoughtful strategies must be taken such as considering cross-selling strategies, maintaining customer relationship management, creating a strong brand presence, and using sales promotion as an event to communicate and inform clearly about the products.

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