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How Can Online Sales Promotion and Web Atmospherics Affect Young Consumers' Online Impulse Buying?

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Daniel Bagaskara[1], *Yunita Budi Rahayu Silintowe[2]

[1,2]*Faculty of Economics and Business, Satya Wacana Christian University, Salatiga Indonesia*

* E-mail: yunita.silintowe@uksw.edu

ABSTRACT

Advanced technology enables trade transactions through internet-linked computers and smartphones. Consequently, consumers increasingly opt for online purchases due to their practicality. Impulse buying is expected to occur when consumers search for product information online. However, not all consumers make impulse purchases easily, despite an attractive marketplace atmosphere and sales promotions. This study examines and analyzes the effects of web atmospherics and online promotions on impulse online purchasing decisions in the Shopee marketplace. Data collection was conducted using purposive sampling, focusing on young respondents who had made unplanned purchases on Shopee. The sample consisted of 198 respondents from a private university who had engaged in impulsive buying on Shopee. Multiple regression analysis (cross-sectional) was employed as the data analysis tool. The study results indicate that online sales promotions and web atmospherics exert a significant direct influence on impulse online purchasing among young consumers. Among these factors, web atmospherics have a stronger effect, as they enhance the ease of navigating the marketplace platform.

Keywords: *online impulse buying, sales promotion, web atmospherics, e-store atmosphere, young consumer, marketplace, Shopee*

INTRODUCTION

Impulse buying is unplanned purchases. Consumers who engage in impulse buying are only attracted to products or brands that have been displayed in e-commerce sites or social media. Impulse buying behavior emerges after consumers have immediate and sudden urges to purchase goods without thoughtful considerations (Beatty and Ferrell, 1998). Hence, impulse buying is spontaneous and completely unplanned decisions. Impulse online buying mitigates time and location limitations commonly found in conventional stores (Eroglu, Machleit, and Davis, 2001). Consumers make more impulse buying decisions when making online purchases (Ozen and Engizek, 2014). In this regard, they are likely to excessively buy when shopping online because online transactions offer various features (Dittmar, Long, and Meek, 2004). Ozen & Engizek (2014) propose several aspects of impulse buying. These aspects are classified as product recommendations and suggestions offered by e-commerce sites, points program, discount information by e-commerce sites, and repurchase reminders (Ozen and Engizek, 2014).

Fill & Jamieson (2006) suggest that besides for attracting and maintaining customers, promotional activities also likely motivate customers to revisit e-commerce websites. Sales promotions include several features such as coupons or vouchers, refunds and rebates, premiums, loyalty programs, discounts, free delivery, purchase points, sample products, bonus pack, cross-promotion, contest/sweepstakes, and advertising specialties (Blomqvist, 2010). Floh & Madlberger (2013) hold that besides promotions through social media, store atmosphere in an online shopping environment also affects significantly online shopping activities. Similar to conventional marketplaces, online

marketplace sites also exhibit a store atmosphere or commonly labeled as web atmospheric or e-store atmosphere that affects consumers' shopping behaviors in online marketplace sites (Utriainen, 2017). Dailey (2004) defines e-store atmosphere or web atmospheric as the design of websites' environment to offer positive impacts to consumers and eventually to generate better consumers' responses (such as revisiting online marketplace sites). Web atmospherics on the front page of websites will potentially attract consumers (Wu et al., 2013).

Karimov, Brussel, Brengman, & Hove (2011) develop a general classification scheme of website design, namely visual design (such as layout and color that affect initial impressions), content design (information provided by websites), and social cue design that enables consumers to communicate with different media. Meanwhile, Manganari et al., (2011) suggest that online store environment consists of four parts, namely virtual layout and design (necessary navigations in online marketplace sites), virtual atmosphere (the color of the website), virtual theatrics (the use of pictures, graphics, animation, and icons to make marketplace sites similar to theaters), and social presence to communicate with consumers in online marketplace stores. Manganari et al. (2011) indicate that the design and development of virtual store layout are crucial because layout directly steers online consumers.

Consumers' impulse buying decisions are closely related to the promotional activities of e-commerce firms. In this regard, Shopee is the leading e-commerce firm in Indonesia according to iPrice and ranks first on both the Play Store and the App Store (iPrice, 2017). Shopee also ranks first in the survey held by Snapcart in the category of "Top three brands with the highest number of recalls." As the most used e-commerce website according to Snapcart's survey (Snapcart, 2018), Shopee launches several promotional activities such as vouchers, discounted prices for several items, cashback for selected items, bonus pack for selected products, and free delivery. Shopee also distributes information through email to consumers who have registered their email addresses to Shopee. Previous studies demonstrate that sales promotion is positively correlated to online impulse buying behavior. In this paper, we add the web atmospheric variable because studies on this issue using the Indonesian context is still limited. A recent literature review by Utriainen (2017) documents that the relationship between consumers' behavior and e-retail characteristics, including e-store atmosphere or web atmospherics, and the effect on consumers' purchasing decisions are still not empirically tested and thus empirical studies on these issues are crucial. Besides, Floh and Madlberger (2013) focus on the effect of the general atmospheric cues of e-commerce on online impulse buying online. Meanwhile, this study focuses more on marketplaces from young consumers' perspectives. Based on these arguments, this study seeks to test the impacts on online sales promotions and web atmospheric on young consumers' online impulse buying on the Shopee marketplace site.

Online Impulse Buying

Maymand & Ahmadinejad (2012) define impulse buying as sophisticated, sudden, spontaneous, and unnecessary behaviors to make quick decisions that suppress rational and detailed thoughts to examine the characteristics of products and their alternatives carefully. Two underlying reasons motivate individuals to make online impulse buying. First, online marketplace sites often offer lower prices. Second, online impulse buying is closely related to emotion in hedonic buying points (Bressolles, Durrieu, and Giraud, 2007). Online impulse buying mitigate time and location limitations commonly found in conventional stores (Eroglu, Machleit, and Davis, 2001). Consumers engage in impulsive buying when making online shopping (Ozen and Engizek, 2014). In this regard, they are more likely to excessively buy when shopping online because online transactions offer various features (Dittmar, Long, and Meek, 2004). There are two components of online impulse buying, namely affective and cognitive components (Coley and Burgess, 2003). The affective component exhibits the dimension

of the drive to buy, as indicated by buying decisions when browsing. Meanwhile, unplanned buying (as indicated by unplanned online purchases of necessary goods) is the dimension of the cognitive component. Further, Ozen & Engizek (2014) argue that the tendency to make online impulse buying exhibit several indicators such as the desire to buy goods, the desire to have better goods, the desire to buy new goods, and the desire to buy unnecessary goods.

Online Sales Promotion

Kotler and Keller (2012) propose that sales promotions as the primary component of marketing campaigns consist of a set of incentivizing, mostly short-term, devices to stimulate consumers or businesses' purchases of better and faster products and services. Firms use sales promotions to convince consumers to buy their products. Fill & Jamieson (2006) establish that promotional activities seek to attract and maintain customers. Furthermore, sales promotions also help firms create intentions that motivate consumers to revisit websites. Sales promotions consist of several features, such as coupons/vouchers, refunds and rebates, premiums, loyalty programs, discounts, free delivery, purchase points, sample products, bonus package, cross-promotion, contest/sweepstakes, and advertising specialties (Blomqvist, 2010).

Besides those sales' promotion features, there are still other promotional devices, such as cashback. Currently popular in e-commerce firms, cashback incentivizes consumers to buy by repaying a part of the money they paid for the transactions (Ho, Ho, and Tan, 2013). Also, sweepstakes and contests that offer prizes are commonly used in online marketplaces because they effectively motivate consumers to visit online marketplace websites (Himawan and Abduh, 2015). Contests and sweepstakes stimulate targeted consumers to respond to firms' sales promotions by offering huge prizes. Offering opportunities for consumers to gain prizes or merchandise will arguably increase their response rate to firms' promotions (Himawan and Abduh, 2015). Those sales promotional devices offer three specific benefits. First, these features manage to attract attention and direct consumers to firms' products. Second, firms' incentives to include several concessions, persuasion, or contributions offer values to consumers. Third, invitations invite consumers to involve themselves in current transactions (Kotler and Keller, 2012).

A prior study by Dawson & Kim (2009) that investigates the effects of consumers' internal and external factors on their impulsive online buying decisions finds that sales promotion as an external factor positively affects online impulsive buying decisions. Similarly, Xu & Huang (2014) analyze the effects of bonus pack and discount on online impulse buying demonstrate that bonus pack and discount as sales promotion devices significantly affect online impulse buying. Based on these arguments, we propose the following hypotheses:

H1: Online sales promotion has a significantly positive effect on consumers' impulse buying decisions.

Web Atmospherics (E-Store Atmosphere)

Dailey (2004) defines e-store atmosphere or web atmospheric as the design of the website environment to create positive impacts on consumers and eventually to improve consumers' responses (such as revisits to online store websites). Similar to the store atmosphere in conventional retail stores, web atmospherics also seek to affect consumers' behaviors when shopping at the stores (Utriainen, 2017). Manganari, Siomkos, & Vrechopoulos (2009) and Liu, He, Gao, & Xie (2008) suggest that web atmospheres and web layout are crucial for the web environment.

According to Manganari et al. (2011), online store environment consists of four parts, namely virtual layout design (navigation on online marketplace websites), virtual atmospherics (colors on online marketplace websites), virtual theatrics (the use of pictures, graphics, animation, and icons to make marketplace sites similar to theaters), and virtual social presence to communicate with consumers on marketplace websites). In this regard, web atmospherics emphasize the virtual layout

design or store layout and design on online marketplace websites (Manganari et al., 2011). The design and layout of online stores are crucial because layout directly attracts consumers' attention in the sense that layout informs consumers about offered products and features on the online stores (Manganari et al., 2011). Manganari et al. (2011) add several indicators on the e-store atmosphere, such as ease of use, familiarity, quick and easily understandable, and well-organized.

Online marketplace websites' characteristics are one of the important drivers of consumers' impulse buying decisions (Stilley, 2010). Karimov et al. (2011) develop a general classification scheme for website design, namely visual design, content design, and social cue design. Visual design is layout and colors that offer consumers' first impressions on online marketplace websites. Content design refers to information provided by online marketplace websites. Lastly, social cue design is the feature within online marketplace websites to enable consumers to communicate with sellers through different media. Consumers will initially encounter e-store atmospheres when they access online marketplace websites. Floh & Madlberger (2013) observe that e-store atmospheres positively affect consumers' online impulsive buying decisions. Based on these arguments, we propose the following hypotheses:

H2: Web atmospherics have a significantly positive effect on consumers' impulse buying decisions

METHODS

Our population was all students of an Indonesian private university who ever engage in online shopping in Shopee.co.id. The sample is a subgroup or an element of the population who are selected to participate in this study. We used purposive sampling to select the sample based on specific considerations that better represent the characteristics of our sample. In particular, the following are the criteria to select the sample. First, respondents must have made buying transactions on Shopee's site or application. Second, respondents must have made impulsive buying on Shopee. Following (Sekaran and Bougie, 2016) who suggest that in general, the sample number between 30 and 500 is appropriate for most studies, this study selected 198 respondents as the final sample.

This study relied on primary data. We generated primary data from the questionnaires to answer the research questions (Malhotra, 2007). In particular, this study used respondents' responses on questions about the effects of online sales promotion and web atmospherics on impulse buying decisions on Shopee. We directly distributed the questionnaire to the research locations and by using online forms to reach targeted respondents more easily.

This study distributed the questionnaire to the selected students of an Indonesian private university. Before analyzing the data, we tested the instrument by running the validity and reliability tests. The validity test measures the validity of the research instrument in measuring the intended concepts. Meanwhile, the reliability test measures the consistency of a measurement tool in measuring the intended concepts (Sekaran and Bougie, 2016). In other words, validity asks whether we measure the concept correctly, and reliability refers to the stability and consistency of the measurement.

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After all the indicators were valid and reliable, we ran the classical assumption test that consisted of the normality, multicollinearity, and heteroskedasticity tests (Martin and Bridgmon, 2012). The normality test determines whether the data is normally distributed, whereas the multicollinearity test evaluates whether the regression model exhibit correlations between independent variables. Independent variables of a multiple regression equation should not be correlated with each other. Lastly, the heteroskedasticity test examines whether the variances of the residuals in the regression model depend on the data value. Homoskedasticity (heteroskedasticity) exists when the variances of the residual of each observation remain constant (changes). A regression model should not exhibit the heteroskedasticity condition.

This study tested the hypotheses by using the multiple regression (cross-sectional) analysis that evaluates the effects of the independent variables (online sales promotion and web atmospherics) on the dependent variable (online impulse buying). The following is the multiple regression equation of this study:

$$OIB = a + b_1(OSP) + b_2(WA) + e \qquad (1)$$

where:
OIB: impulse buying online
OSP: online sales promotion
WA: web atmospherics
a: constant
b1: the regression coefficient of the online sales promotion variable
b2: the regression coefficient of the online web atmospherics variable
e: error

Therefore, the measurement variables in this study were adapted from the extant literature (Table 1).

Table 1. Scale measurement and its resources

Variable	Concept Definition	Indicators	Source
Online Impulse Buying (OIB)	Impulse buying is a complicated, sudden, spontaneous, and unnecessary behavior to make quick decisions to suppress rational and detailed thoughts in examining the characteristics of products and their alternatives carefully	1. Desire to buy goods 2. Buying when browsing 3. Desire to buy needed goods 4. Unplanned online purchase 5. Desire to buy high-quality goods 6. Desire to buy new goods 7. Desire to buy unnecessary goods	(Coley and Burgess, 2003); (Ozen and Engizek, 2014)

	(Maymand and Ahmadinejad, 2012).		
Online Sales Promotion (OSP)	Sales promotion is the transmission of the firm's information to consumers through communication channels (Kotler and Keller, 2012)	1. Discount 2. Cashback 3. Bonus pack 4. Social media promotion 5. Online coupon/voucher 6. Information through e-mail 7. Free delivery	(Blomqvist, 2010)
Web Atmospherics (WA)	Web atmospherics or e-store atmosphere is the design of the website environment that offers positive impacts to consumers and eventually to generate better consumers' responses (Dailey, 2004).	1. Ease to use 2. Familiarity 3. Quick to Use 4. Understandable 5. Well-organized	(Manganari et al., 2011)

Source: Data by Author

RESULTS

Instrument Testing

In the initial stage of the study, instrument testing was conducted with a sample of 30 respondents. Data collection was carried out using purposive sampling, a sampling technique based on specific criteria deemed suitable for the characteristics required in the study. The main criterion for respondents to participate in the questionnaire was having made at least one unplanned purchase on Shopee. The questionnaire was distributed by first asking potential respondents whether they had ever made an unplanned purchase on Shopee, before providing them with a link to a Google Form for questionnaire completion.

The instrument testing included validity and reliability tests. In the validity test, a statement is considered valid if the significance value is below 0.05 (Hair, Black, Babin, & Anderson, 2019). The results showed that all questionnaire items had a significance value below 0.05, indicating that all items were valid. Next, a reliability test was performed, where a statement is considered reliable if the Cronbach's alpha value exceeds 0.07 (Hair et al., 2019). The reliability test results are presented in the table below:

Table 2. Reliability Test Result

Variable	Cronbach's Alpha Value	Conclusion
Online impulse buying (Y)	0.786	Reliable
Sales promotion (X1)	0.716	Reliable
E-store atmosphere (X2)	0.881	Reliable

Source: Data processed calculation

Based on the validity and reliability test results, the instrument is deemed valid and reliable, meaning that no further adjustments are necessary, and it can be used for the main study.

The Description of Respondents' Data

After conducting the instrument test or pre-test, the data was distributed to the main study respondents. There were 232 respondents filled in the questionnaires with only 198 usable responses. Table 3 below demonstrates the description of the respondents' data.

Table 3. Respondents' Data

Explanation		Number	Percentage
Sex	Male	55	28%
	Female	143	72%
Age	<17	7	3%
	18-19	51	26%
	20-21	99	50%
	≥22	41	21%
Purchase Frequency	Once	53	27%
	2-3 times	78	39%
	≥ Four times	67	34%
Type of Goods Bought impulsively (more than one option possible)	Clothes	93	24%
	Shoes	49	13%
	Bag	35	9%
	Watch	16	4%
	Electronic Appliance	30	8%
	Handphone and Its Accessories	19	5%
	Beauty Product	69	18%
	Hobbies and Collection	26	7%
	Photography	7	2%
	Fashion Accessories	21	5%
	Food	15	4%
	Others, ...	7	2%

Source: Data processed calculation

The table suggests that most respondents (143 respondents or 72% of total respondents) were female. Also, more than 50% of the total respondents (99 people) were between 20-21 years old. Further, respondents mostly bought fashion products such as clothes (93 respondents), shoes (49 respondents), and bags (35 respondents), followed by beauty products with 69 respondents. The descriptive data informs Shopee to focus its promotional activities on these segments.

Validity and Reliability Tests

The research instruments consisted of 19 items that were developed from three variables, namely online impulse buying (OIB1-OIB7), online sales promotion (OSP8-OSP14), and web atmospherics (WA15-WA19). There were 232 initial respondents but with only 198 usable responses because 34 respondents did not qualify for further tests. After generating all data, we then ran the validity and reliability tests from these 198 respondents. The validity test evaluates the validity of the research questionnaire. The research instrument is considered valid if the r-statistic > r-table. The r-table value for 198 respondents is 0.139. The following are the results of the validity test for each question item in the questionnaire.

Table 4. The Results of the Validity Test

Variable	Item	r statistic	Conclusion
Online Impulse Buying (OIB)	OIB1	0.736	Valid
	OIB2	0.461	Valid
	OIB3	0.628	Valid
	OIB4	0.679	Valid
	OIB5	0.646	Valid
	OIB6	0.644	Valid
	OIB7	0.653	Valid
Online Sales Promotion (OSP)	OSP8	0.647	Valid
	OSP9	0.674	Valid
	OSP10	0.731	Valid
	OSP11	0.547	Valid
	OSP12	0.735	Valid
	OSP13	0.527	Valid
	OSP14	0.533	Valid
Web Atmospheric (WA)	WA15	0.830	Valid
	WA16	0.803	Valid
	WA17	0.785	Valid
	WA18	0.864	Valid
	WA19	0.821	Valid

Source: Data processed calculation by author

The table shows that all items had the r statistic > 0.139, suggesting that all items were valid. We then ran the reliability test to analyze the reliability of the research instrument. A questionnaire is considered reliable if the Cronbach's alpha > 0.70. The following are the results of the reliability test.

Table 5. The Results of the Reliability Test

Variable	Cronbach's alpha	Critical Value	Conclusion
Online Impulse Buying (OIB)	0.757	0.70	Reliable
Online Sales Promotion (OSP)	0.752	0.70	Reliable
Web Atmospheric (WA)	0.810	0.70	Reliable

Source: Data processed calculation by author

The table demonstrates that the Cronbach's Alpha of these three variables > 0.70, implying that all variables were reliable.

Test of Classical Assumptions

The normality test evaluates whether the research data is normally distributed. The significance value > 0.05 indicates that the data is normally distributed. The results of the normality test show that the significance value = 0.200, which was higher than 0.05. Thus, our data was normally distributed. The next test of classical assumption was the multicollinearity test that analyzes whether the independent variables of this study are correlated. Independent variables are considered not correlated with each other if the Variance Inflation Factor (VIF) value < 10 and the tolerance value > 0.10. The tolerance values of the WA and OSP variables were 0.814 that were higher than 0.10. Meanwhile, the Variance Inflation Factor (VIF) values of both variables were 1.229 (<10). The findings

imply that there was no multicollinearity between the independent variables. Next, we ran the heteroskedasticity test to test whether examines whether the variances of the residuals in the regression model depend on the data value. In this test, the data is considered from the heteroskedasticity problem if the significance value > 0.05. The heteroskedasticity test informed that the significance value of variable X1 or online sales promotion was 0.074 > 0.05, and variable X2 or web atmospherics was 0.699 > 0.05. Thus, the findings conclude that there was no heteroskedasticity problem in these two independent variables.

Hypothesis Testing

The hypothesis testing analyzes the significance of the effects of the independent variables on the dependent variable. The effect is considered significant if the significance value < 0.05.

Table 6. The Results of the Hypothesis Testing

Test	Statistic Values			
Multiple Linear Regression				
Model	B	Std. Error	t	Sig
(Constant)	7.933	1.965	4.037	0.000
Online Sales Promotion	0.202	0.086	2.356	0.019
Web Atmospheric	0.329	0.102	3.241	0.001
Correlation Coefficient				
Model		R	R^2	Adjusted R^2
1		0.353	0.125	0.166

Source: Data processed calculation by author

The above table suggests that the significance value of the online sales promotion variable was 0.019 < 0.05, thus implying that hypothesis 1 that predicts that online sales promotion has a significantly positive effect on online impulse buying was empirically supported. In a similar vein, the web atmospherics variable has the significance value of 0.001 < 0.05. Hence, hypothesis 2 that predicts that web atmospherics have a significantly positive effect on online impulse buying was also empirically supported. Our multiple regression analysis resulted in the following regression equation:

$$OIB = 7{,}993 + 0{,}202\ (OSP) + 0{,}329\ (WA) + e \qquad (2)$$

The above equation shows that the constant value was 7.933. This figure suggests that when online sales promotion and web atmospherics were equal to zero, then online impulse buying would be 7.933. Next, the regression coefficient that represents the magnitude of the positive effect of online sales promotion on online impulse buying was 0.202, whereas the magnitude of the positive effect of web atmospherics on online impulse buying was 0.392. In particular, the regression coefficient of online sales promotion of 0.202 implies that if the online sales promotion of Shopee increases by one unit, then impulse buying on Shopee will increase by 0. 202 unit. The positive regression coefficient indicates the positive impact of online sales promotion on online impulse buying on Shopee. Also, the regression coefficient of web atmospherics was 0.329. Hence, if the web atmospherics of Shopee increases by 1 unit, then impulse buying on Shopee will increase by 0.329 unit. The positive regression coefficient indicates the positive impact of web atmospherics on online impulse buying on Shopee.

The above regression equation demonstrates that web atmospherics exhibited a greater impact on online impulse buying than online sales promotions. When making impulse buying decisions on Shopee, young consumers would likely put the weight of the online layout of Shopee of 0,392 and online sales promotion of 0.202. A likely explanation was because Shopee's layout was more easily understandable and visible, and consumers would only need a relatively short time to use Shopee smoothly. The results of the multiple regression also show that the coefficient of determination or R square value was 0.125. This finding suggests that 12.5% of the variances of impulse online buying

on Shopee are affected by online sales promotion and e-store atmosphere, and the rest (87.5%) is affected by other variables.

DISCUSSIONS

The Effect of Online Sales Promotion on Online Impulse Buying

The test of hypothesis 1 finds that Shopee's online sales promotion significantly affects the online impulse buying of young consumers. The result is in line with Dawson & Kim (2009), who document that the sales promotion variable positively affects online impulse buying decisions. This study also supports Akram et al. (2018), who reveal that sales promotion is a crucial factor in increasing online impulse buying behavior in China. In particular, consumers buy products spontaneously due to sales promotion. Also, Crespo-Almendros and Del Barrio-García (2016) underscore the needs to identify the most appropriate promotion strategies for firms in the aviation industry to increase their communication and profits. Besides, online sales promotion related to flight ticket fits better with new internet users (Crespo-Almendros and Del Barrio-García, 2016).

This study shows that most Shopee's consumers (71.2%) agreed that they were attracted to Shopee's free delivery promotion, 55.6% of respondents strongly agreed that they were attracted to shop on Shopee because of its discounts. These factors indicate that Shopee's promotions attracted their attention. Also, Shopee's sales promotion could increase young consumers' impulse buying. The descriptive statistics also reveal that the highest average score of the online sales promotion was that the respondents were attracted to Shopee's free delivery promotion (3.63), Shopee's discounts (3.40), and Shopee's vouchers (3.37). These findings indicate that consumers liked Shopee's online sales promotion that they are attracted to make impulse buying decisions on Shopee.

Shopee quite frequently launches online sales promotion, especially near holidays or the National Online Shopping Day, on November 11. It mainly relies on social media such as Instagram for its online sales promotion. Our findings then inform Shopee to analyze their products that were often bought impulsively. Thus, Shopee can better focus its promotional activities, such as offering discounts and free delivery for fashion products (e.g., women's clothes and bags), and beauty products (skincare and facial masker). Shopee can also offer cashback and bonus packs for these products to enhance female consumers' impulse buying.

The Effect of Web Atmospherics on Online Impulse Buying

The test of hypothesis 2 concludes that web atmospherics positively affects the online impulse buying of Shopee's young consumers. The result is similar to Floh & Madlberger (2013). They document the significantly positive effect of e-store atmospheres on consumers' online impulsive buying decisions from two cue dimensions of virtual atmospheres (design and navigation). Also, Akram et al., (2018) observe that website quality is a crucial element that affects online impulse buying, besides conventional shopping setting. Hence, marketplaces need to focus on their web atmospherics to attract their customers to make impulse buying. According to Wu et al. (2013), better layouts and comfortable atmospheres will increase consumers' emotional desires. Consequently, consumers will tend to buy online when online stores design their layouts effectively. From the hygiene factor perspective (Lo, Lin and Hsu, 2016), lack of website's hygiene factor will motivate consumers to be more cautious when making online impulse buying due to uncertain information, decreased effectiveness of online store design and persuasiveness of sales promotion, consumers' increased self-control, and restricted online impulse buying.

The findings are supported by the data that shows that 59.1% of total respondents strongly agreed that Shopee's layout was clear and easily understandable. Next, 56.6% of the respondents strongly agreed that they did not need much time to operate Shopee's website. The descriptive statistics also show that respondents strongly agreed that all indicators of the e-store atmospheres variable were easily used, familiar, quick to use, easily understandable, and well-organized. The data indicates that the display of Shopee's website is attractive, and Shopee needs to maintain its quality to increase young consumers' impulse buying.

Students who are very familiar with the internet will arguably stand in browsing the internet, such as Shopee. The layouts of websites or applications will attract ones when they browse. Websites' ease of use and information clarity will motivate consumers to spend more time on those websites. Thus, Shopee needs to maintain the quality of its website layout and make it simpler to provide more organized information to consumers. Consequently, browsing consumers will obtain information about goods they would like to buy, and its promotion will be well delivered to its consumers.

Further, the multiple regression test demonstrated that online sales promotion and web atmospherics could only explain 12.5% of the variance of online impulse buying, and the rest (87.5%) of the variance was affected by other variables. Other variables that can influence online impulse buying include influencer marketing (Koay et al., 2021), social presence (Li, Wang, & Cao, 2022), brand social media marketing (Koay & Lim, 2025; Safeer, 2024), advertising values (Feng, Al Mamun, Masukujjaman, & Yang, 2023) and various other factors.

CONCLUSION

This study finds that online sales promotion and web atmospherics have significantly positive effects on the online impulse buying of young consumers on Shopee. Specifically, online sales promotion positively affects online impulse buying. Thus, if Shopee increases its online sales promotion, online impulse buying on Shopee will also increase. In a similar vein, web atmospherics positively affects the online impulse buying of students as young consumers. Hence, web atmospherics or optimal layout will increase impulse online buying on Shopee. Our results support Dawson and Kim (2009) and Xu and Huang (2014), who observe that online sales promotion has a significantly positive effect on online impulse buying. Also, this study is in line with Floh & Madlberger (2013), who document that web atmospherics positively affects online impulse buying decisions. The findings of this study contribute to the theoretical framework in the field of digital marketing, demonstrating that enhanced online sales promotion and web atmospherics lead to a greater increase in customers' online impulse buying behavior.

This study demonstrates that the online sales promotion variable and web atmospherics significantly affect the online impulse buying decisions of young consumers on Shopee. The descriptive statistics inform that the cashback, bonus pack, and promotion via social media and e-mail still leave room for improvements because, on average, their scores were in the "agree" category. Meanwhile, free delivery, discount, and vouchers were online sales promotions with the highest scores. Consequently, Shopee needs to maintain these scores. Also, in general, consumers indicated that they liked the web atmospherics (especially the design) that Shopee needs to maintain or even enhance its facilities but still keep its features user friendly. This study only used students at an Indonesian private university that limits the generalizability of our results. Thus, future studies can incorporate additional variables that may have a significant impact on online impulse buying. We also recommend that future studies conduct comparative analyses of multiple online marketplaces to gain deeper insights into consumer behavior and market dynamics.

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