


The Influence of Sales Promotion, FoMO, and Digital Payment on Impulsive Buying in the Digital Era

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ABSTRACT

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Afyana, S., & Abdillah, W. (2026). The convenience, sales promotions, and fear of influence of sales promotion, FoMO, and missing out (FoMO). This study aims to digital payment on impulsive buying in the explore the impact of sales promotion and digital era. *International Journal of FoMO on impulsive buying behavior, and to Accounting and Finance in Asia Pacific*, analyze the moderating role of PayLater within these relationships. A quantitative approach was employed, using a survey method involving 308 Generation Z students who utilized PayLater services for online purchases. Data were collected using a Likert-scale questionnaire and subsequently analyzed with Structural Equation Modeling (SEM) through SmartPLS. The results reveal that sales promotion ($b = 0.201$; $p = 0.007$), FoMO ($b = 0.493$; $p < 0.001$), and PayLater ($b = 0.207$; $p = 0.001$) each demonstrate a positive and significant effect on impulsive buying behavior. Furthermore, PayLater significantly moderates the connection between FoMO and impulsive buying behavior ($b = 0.090$; $p = 0.045$), although its moderating effect on the sales promotion-impulsive buying relationship was not supported ($b = -0.033$; $p = 0.374$). These findings suggest that the convenience of digital payment systems might increase impulsive consumption, emphasizing the necessity for improved financial awareness and responsible promotional strategies.

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INTRODUCTION

Technological advancements and easy internet access have influenced the way people shop, especially online. In Southeast Asia, particularly in Indonesia, young people are increasingly inclined to shop quickly and without further thought. This phenomenon is further fueled by the presence of digital payment services, such as e-wallets and buy now, pay later (BNPL) features that enable faster and more practical transaction processes (Ngo et al., 2024). Currently, most purchasing activities are conducted through online platforms, and the economic value generated from digital activities continues to increase (Google et al., 2023). According to Kumar et al. (2024), the use of BNPL services has been shown to increase online spending by up to 6.42%, leading to impulsive buying behavior. This effect is particularly relevant for Generation Z students, who are familiar with the digital world and social networks. The results of this study align with the findings of Aisjah (2024), which show that high intensity of social media use and poor financial management among students can increase financial and psychological risks, such as digital anxiety and uncontrolled shopping tendencies.

This situation is triggered by external factors, for example, the convenience offered in the payment transaction process, as well as aggressive promotional strategies, advertisements aimed at individuals, and social media content that encourages spontaneous purchases (Djamhari et al., 2024; Nyrhinen et al., 2024). Advertising messages that evoke emotional feelings can trigger individuals to lose self-control (Rodrigues et al., 2021). Besides that, Akbari et al. (2021) explain that the fear of missing out (FoMO) arises from interactions with the digital world, and this strengthens the desire to follow shopping trends. Marketing strategies that focus on scarce aspects can create a sense of urgency in consumers, thus encouraging them to buy immediately (Zhang et al., 2022). Although various previous studies by Brailovskaia & Margraf (2024) and Mandolfo et al. (2022) have shown that discount promotions can encourage impulsive purchases and FoMO can reinforce consumption behavior through social media, the role of PayLater service usage as a moderating factor in this relationship remains understudied. However, with the increasing use of digital services in Indonesia, particularly among college students who frequently use social media and digital financial services, this phenomenon is becoming increasingly relevant for research.

According to this idea, external stimuli can influence a person's (organism's) thoughts and feelings, then produce a specific response. In impulse buying situations in the digital world, sales promotions and FoMO serve as stimuli that influence consumer psychology. Furthermore, the use of PayLater-based payment systems has the potential to strengthen impulsive behavior tendencies in consumers (Djamhari et al., 2024). Therefore, this theory is very important to know that impulsive behavior can be influenced by the relationship between factors outside the environment.

This research changes and extends the study of Djamhari et al. (2024) and Mandolfo et al. (2022) by examining the effects of sales promotions and FoMO on impulse buying. In this study, PayLater acts as a moderating variable. With more people using PayLater, this study aims to evaluate this relationship, which has not previously been shown to be significant. The information used in this study was collected from a sample of university students using a survey technique.

In theory, this study deepens our understanding of the relationship between ease of financial access and emotional factors and marketing strategies that shape impulsive behavior. In practice, the results support the advancement of financial innovation. A concrete example of this is the regulation related to BNPL, which can help mitigate

financial risk. This research provides a novel insight into the role of PayLater as a factor influencing the relationship between sales promotions and FoMO on impulsive purchasing decisions among Generation Z students in Indonesia, a topic that has not been widely discussed in previous research.

LITERATURE REVIEW

Stimulus – Organism – Response (SOR) Theory

The Stimulus-Organism-Reaction (SOR) model proposed by [Mehrabian and Russell \(1974\)](#) suggests that individual actions are formed through the relationship between external stimulus (S), the individual's internal psychological state (O), and the resulting behavioral response (R). In the context of impulsive buying behavior in the digital era, stimuli include sales promotions, FoMO impulses, and the convenience of digital payment methods that trigger sudden interest felt by consumers and then cause mental reactions that arise within them, such as an emotional desire to immediately make a purchase or a perspective on the convenience of transactions, which ultimately encourages individuals to make impulsive purchases and can cause adverse financial impacts. This model shows that people's decisions to buy goods are not only influenced by rational thinking, but also by external influences that trigger the process of feelings and thinking within the buyer ([Sultan et al., 2021](#); [Zhu et al., 2019](#)). Therefore, this study explores how sales promotions, FoMO, and digital payment methods as external factors influence consumers' minds, which ultimately trigger impulsive shopping actions and their impact on finances.

Sales Promotion

Sales promotion, characterized by its transient nature, constitutes a marketing communication strategy specifically formulated to furnish consumers with inducements, thereby fostering prompt acquisition. Such inducements frequently encompass price reductions, monetary rebates, vouchers, or time-constrained propositions, which collectively engender a heightened sense of immediacy within the consumer's purchasing calculus. Within the digital marketing paradigm, sales promotion emerges as a principal stimulus, proficient in augmenting consumers' affective responses, particularly in the facilitation of impulsive purchasing patterns ([Aini & Yuana, 2023](#)).

Prior research has substantiated that sales promotion functions not merely as an exogenous stimulus but also serves to amplify the impact of intrinsic psychological determinants, including hedonic motivation, product appeal, and positive affect, in precipitating consumers' impulsive purchasing behavior ([Utami et al., 2021](#)).

Consequently, a direct correlation is observed wherein the enhanced allure of the promotional strategy corresponds to an elevated propensity for consumers to engage in spontaneous acquisitions. Therefore, sales promotion is discernible as a pivotal exogenous variable exerting influence upon impulsive buying behavior, particularly pertinent within the intensely competitive e-commerce milieu, which is substantially predicated upon visual and emotional inducements ([Aini & Yuana, 2023](#)).

Fear of Missing Out (FoMO)

FoMO is characterized as a psychological construct, manifesting as anxiety stemming from an individual's apprehension of being excluded from information, experiences, or prevailing trends within their social milieu, particularly as disseminated via digital media. This phenomenon typically originates from the perception that peers are engaging in more gratifying experiences, thereby fostering a compulsion for perpetual social media engagement and continuous monitoring of others' activities. Within the domain of

consumer behavior, FoMO functions as a psychological impetus capable of augmenting the propensity for impulsive purchasing. This occurs as individuals are compelled to execute immediate acquisitions to circumvent the sensation of being excluded from current trends (Alfina et al., 2023).

Prior research has demonstrated that FoMO exerts a substantial impact on impulsive purchasing behaviors, particularly evident among younger cohorts who exhibit high levels of social media engagement. In this demographic, the apprehension of overlooking trends and promotional offers can precipitate spontaneous purchasing decisions (Alfina et al., 2023). Moreover, the intensity of digital exposure serves to amplify FoMO, inducing social and emotional pressures upon individuals that subsequently foster spontaneous consumptive patterns (Zhang et al., 2022). Within the realm of digital marketing, FoMO is frequently leveraged via promotional strategies predicated on principles of urgency and scarcity, thereby reinforcing consumers' intentions to purchase.

PayLater

PayLater services represent a novel advancement within digital payment infrastructures, enabling consumers to acquire goods or services immediately while deferring the corresponding payment to a subsequent period. This mechanism offers enhanced convenience and adaptability throughout the transactional workflow, particularly pertinent to the domain of electronic commerce. Investigations undertaken by Djamhari et al. (2024) suggest that digital payment modalities, including PayLater, possess the capacity to influence inclinations towards impulsive purchasing. Specifically, experimental studies involving digital consumers revealed that PayLater utilization exhibited a measurable average effect on impulsive buying behavior.

Moreover, the provision of PayLater services permits consumers to procure items without requiring immediate payment at the point of sale. This characteristic, as noted by Khatimah et al. (2024), may elevate the propensity for unplanned acquisitions, particularly in the absence of judicious financial oversight. Consequently, the integration of PayLater services within the electronic commerce landscape may be regarded as a significant determinant influencing consumer impulsive buying behavior, primarily attributable to the facilitated credit accessibility and the inherent payment flexibility they afford.

Impulse Buying

Impulse buying is defined as a consumer behavior that manifests spontaneously, devoid of prior planning, and is typically instigated by affective drivers upon exposure to specific marketing inducements (Khatimah et al., 2024). Within the digital commercial landscape, facilitated informational retrieval, diverse promotional initiatives, and expedited transactional mechanisms via electronic commerce platforms are observed to augment consumer propensity towards impulsive acquisitions (Aini & Yuana, 2023).

Furthermore, strategic promotional endeavors, exemplified by flash sales, product bundling, and free shipping discounts, are capable of fostering a perceived value proposition for consumers, consequently stimulating impromptu acquisition choices. Social media marketing initiatives are additionally instrumental in augmenting impulse buying by generating perceptions of immediacy and heightened anticipation, especially within demographic segments comprising younger individuals who are frequent users of digital interfaces (Gadi et al., 2026). Consequently, impulse buying may be conceptualized as an unprompted acquisition pattern shaped by promotional inducements, the affective states of consumers, and an online ecosystem conducive to expedited transactional outcomes.

Hypotheses Development

The Effect of Sales Promotion on Impulse Buying

Sales promotions play a very important role in encouraging unplanned purchases, as people tend to be triggered to buy suddenly when they see various attractive offers. Contemporary research suggests that strategic marketing stimuli, such as price concessions and time-bound propositions, are capable of eliciting favorable affective responses among consumers and consequently heightening the propensity for spontaneous purchasing behavior. This effect is attributed to the augmentation of the perceived value and desirability of the product or brand facilitated by these promotional efforts (Djamhari et al., 2024; Jee et al., 2025).

Muhammad et al. (2020) suggest that creatively designed and responsibly executed promotions can increase consumer involvement and generate positive reactions to the brand. Lee and Charles (2021) state that how well promotions can influence purchasing decisions is influenced by ethical factors and the level of consumer trust in the seller. On the other hand, revealed that promotions that emphasize the emotional side are usually more successful in attracting consumers' attention and influencing purchasing decisions quickly compared to more logical methods. Therefore, in this study, sales promotions are considered an important component that can influence consumer shopping behavior through their perspectives and emotions.

H1: Sales promotions have a positive effect on impulse buying.

The Influence of FoMO on Impulse Buying

A psychological phenomenon, designated as FoMO, is characterized by the manifestation of apprehension originating from the concern of exclusion from desirable experiences in which others are participating. This condition is frequently amplified through interactions on digital social platforms (Elsayed, 2025). This feeling stems from the natural human instinct to want to be accepted and collaborate in groups. According to attachment theory (Roberts & David, 2020), suggest that promotions can increase how often people use social media because they want to stay connected to their social circle. Their research also shows that high levels of FoMO are often associated with mental health issues such as low self-esteem and increased feelings of loneliness, especially among young people who frequently use social media.

Hussain et al. (2023) revealed that promotions can trigger impulsive buying behavior in digital environments because people tend to buy on impulse to maintain their social image and avoid feeling left behind compared to others. In line with these findings, Brailovskaia and Margraf's (2024) research shows that high levels of FoMO are associated with excessive involvement in social media use and an increased tendency towards consumer behavior. However, these negative impacts can be minimized if individuals have good self-awareness and the ability to control impulsive urges. Therefore, FoMO plays a crucial role in demonstrating how emotional impulses and social influences influence people's shopping behavior in the digital age. Based on this information, the hypothesis of this study is:

H2: FoMO has a positive effect on impulse buying.

The Effect of PayLater Use on Impulsive Buying

PayLater is a digital payment option that allows users to purchase goods or services without having to pay in full upfront, but can instead pay in installments or deferred payments. On the other hand, e-wallets are digital platforms for storing electronic money

and simplifying transactions for users, eliminating the need for cash, conveniently and securely, via mobile phones (Lee et al., 2023). Payment methods like PayLater and e-wallets have been shown to influence impulse buying habits, as they make shopping easier and more convenient. This allows people to shop more freely, as psychological barriers to making payments are reduced, making spending feel less stressful. As a result, consumers, especially younger generations, tend to spend money more spontaneously without further thought (Kapoor et al., 2022). Based on the explanation above, the research hypothesis is as follows:

H3: The use of PayLater has a positive effect on impulse buying.

The Role of PayLater as a Moderator in the Effect of Sales Promotions on Impulse Buying

Sales promotions play a crucial role in marketing tactics to encourage impulse purchases, particularly when offered in the form of discounts, cashback, or limited-time offers (Bandyopadhyay et al., 2021; Djamhari et al., 2024). In the age of digital payments, the convenience offered by digital wallets and other payment methods also increases consumers' propensity for impulse purchases. Consequently, the payment process becomes easier and less burdensome (Lee et al., 2023; Parameswaran & Islam, 2022). Recent research indicates that pay-later services can accelerate purchasing decisions and make promotions more effective. This occurs because consumers feel more financially secure and more prepared to act boldly when faced with attractive offers (Kumar et al., 2024). Therefore, the introduction of PayLater strengthens the impact of sales promotions on impulse purchases, as consumers are encouraged to take advantage of the offer immediately without having to pay immediately. Based on the explanation above, the research hypothesis is:

H4: PayLater positively moderates the relationship between sales promotions and impulse purchases.

The Role of PayLater as a Moderator in the Influence of FoMO on Impulse Purchases

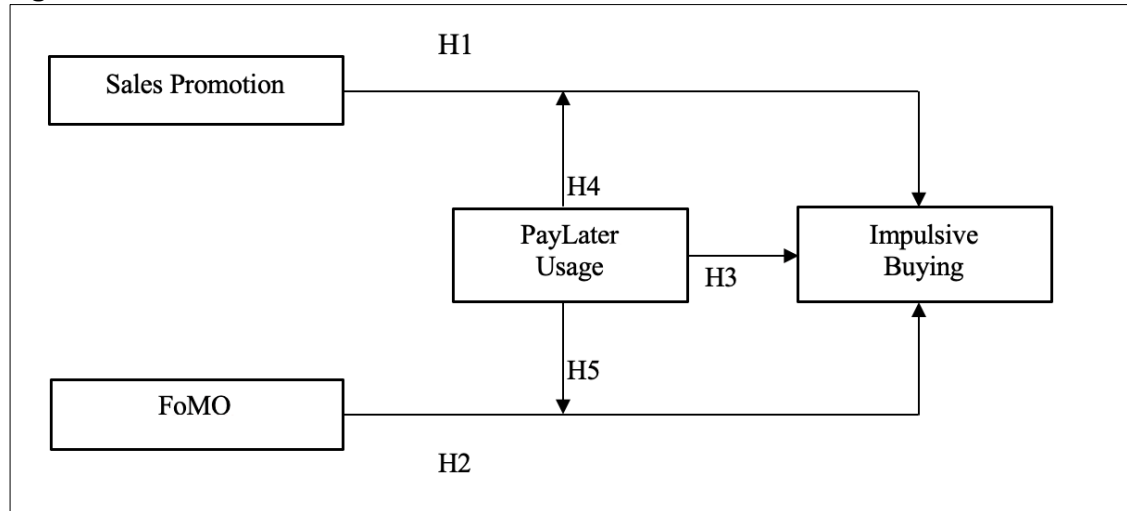
FoMO is a psychological condition in which individuals experience anxiety and stress due to the FoMO on a particular experience or opportunity. This motivates them to act immediately, including making purchases without careful planning (Akbari et al., 2021). FoMO can also amplify emotional desires and a sense of urgency when shopping, as individuals feel the need to immediately obtain popular or limited-supply items (Chen et al., 2022; Hussain et al., 2023). In this regard, the availability of fast payment methods like PayLater makes people prefer to purchase items without having to pay up front, giving them confidence that their financial problems will soon disappear (Lee et al., 2023). The presence of FOMO, combined with the ease of using PayLater, further encourages impulse buying, as consumers feel more capable and able to satisfy their emotional needs (Kumar et al., 2024). Based on this explanation, the research hypothesis is:

H5: PayLater positively moderates the relationship between FoMO and impulse buying.

Conceptual Framework

The study framework model is depicted in [Figure 1](#).

Figure 1. Research Framework



[Figure 1](#) outlines the conceptual framework for this investigation. It is hypothesized that both sales promotion and the FoMO directly influence impulsive buying behavior (H1 and H2). Furthermore, PayLater is also posited to have a direct impact on impulsive buying behavior (H3). Additionally, PayLater is proposed to moderate the relationship between sales promotion and impulsive buying (H4), as well as the relationship between FoMO and impulsive buying (H5).

RESEARCH METHOD

Research Design

This research adopted a quantitative survey methodology to investigate the interrelationships among sales promotion, the FoMO, PayLater utilization, and impulsive buying behavior within the realm of digital financial services. The theoretical framework for this study was an adaptation of the model proposed by [Djamhari et al. \(2024\)](#), with PayLater specifically integrated as a moderating variable. Data were amassed via a structured questionnaire, and the investigation deliberately avoided an experimental design.

Population and Sample

The study's population comprised Generation Z university students, aged 18 to 25 years. These individuals were chosen due to their active engagement with e-commerce platforms and their prior experience utilizing PayLater services for online transactions. A purposive sampling approach was adopted, as participants needed to satisfy specific criteria directly related to the research objectives. Overall, 308 respondents participated in this study.

Data Collection

Data were gathered via an online survey, which was disseminated using Google Forms. This approach was selected to provide participants with straightforward access and a convenient means of completing the questionnaire. The survey instrument comprised multiple questions crafted to assess the research variables. Each item was rated on a five-point Likert scale, coded from 1 = "strongly agree" to 5 = "strongly disagree".

Measurement of Variables

The measurement instruments employed in this investigation were derived from various preceding studies. Impulsive buying behavior was quantified using seven items adapted from Verplanken and Herabadi (2001). Sales promotion was gauged with five items, extracted from the shopping tendency construct scale developed by Mandolfo et al. (2022). This scale specifically probes consumer responses to advertising and promotional endeavors within digital purchasing environments. For the assessment of FoMO, five items adopted from Lim (2016) were utilized. Lastly, the PayLater variable was measured using three items that had been adapted from (Badgaiyan & Verma, 2015).

Data Analysis

The gathered data underwent analysis using SEM, specifically implemented with SmartPLS software. This SEM approach was utilized to investigate the relationships between constructs and to ascertain the extent to which independent variables accounted for the variance in the dependent variable. The measurement model's evaluation encompassed reliability and validity assessments, including Cronbach's alpha, composite reliability, and convergent validity. Discriminant validity was examined through the application of the Fornell–Larcker criterion and cross-loading analysis. Only upon satisfying all these criteria was the measurement model deemed valid and reliable, thus allowing for the subsequent testing of the structural model. The PLS-SEM methodology is designed to maximize the explained variance of endogenous constructs and their indicators, and it is a widely adopted technique for testing hypotheses and evaluating the robustness and consistency of research models (Sabol et al., 2023). Table 1 presents the operationalization of the research variables.

Table 1. Operationalization of Variables

Variables	Statement items		Source
Impulse Buying (Y)	1	The habit of buying something when you see something you like.	(Verplanken & Herabadi, 2001)
	2	The tendency to make spontaneous purchases when shopping online.	
	3	The inability to resist the urge to buy something.	
	4	The act of purchasing without prior planning.	
	5	The decision-making process occurs without careful consideration.	
	6	The tendency of individuals to purchase products they had not previously planned to purchase.	
	7	Purchasing behavior driven solely by desire, even if the product is not a primary need.	
Sales Promotion (X1)	1	The extent to which respondents perceive the value of promotional offers.	(Mandolfo et al., 2022)
	2	Level of interest in discount offers.	
	3	Sensitivity to limited-time offers	
	4	Individual propensity to use coupons or cashback.	
	5	Individual behavior in browsing products due to promotions.	
FoMO (X2)	1	Anxiety when people experience more enjoyable things.	(Lim, 2016)
	2	Feelings of fear and anxiety when not knowing what others are doing.	
	3	Worry about missing out on a purchase opportunity.	

	4	The urge to respond immediately to promotional information.	
	5	The feeling of discomfort individuals experience when unable to participate in ongoing activities or events.	
PayLater (M)	1	Tendency to use PayLater services when the balance is insufficient to make a transaction.	(Badgaiyan & Verma, 2015)
	2	Individual perceptions of the smoothness of PayLater transactions.	
	3	Habit of using PayLater when there are promotions or attractive offers.	

RESULTS

Respondent Characteristics

The information used in this study is primary data obtained directly from the primary research source, namely, respondents through questionnaires. This study collected information online using a digital platform in January 2026. During the data collection process, 340 respondents were identified, and of these, 32 did not meet the specified criteria. This resulted in 308 respondents meeting the specified criteria. Detailed data and information regarding respondent characteristics are presented in [Table 2](#).

Table 2. Respondent Characteristics

Category	Items	Frequency	(%)
Age	18-20 years	19	6.2
	21-23 years	262	85.1
	24-25 years	27	8.8
Gender	Male	79	25.6
	Female	229	74.4
Status	Active Undergraduate Students	308	100
Region of Residence	Sumatra	96	31.2
	Java	168	54.5
	Kalimantan	17	5.5
	Sulawesi	9	2.9
	Bali and Nusa Tenggara	11	3.6
	Maluku and Papua	7	2.3

[Table 2](#) presents the demographic characteristics of the participants. The largest segment of respondents, 85.1%, were aged 21–23 years. Following this, 8.8% were aged 24–25 years, and 6.2% were 18–20 years old. In terms of gender, females constituted the majority at 74.4%, while males accounted for 25.6%. It was observed that all respondents in this study (100%) were currently active undergraduate students. Regarding their region of residence, the highest proportion of respondents came from Java (54.5%), with Sumatra following at 31.2%. Smaller fractions originated from Kalimantan (5.5%), Bali and Nusa Tenggara (3.6%), Sulawesi (2.9%), and Maluku and Papua (2.3%).

Validity and Reliability Test

Validity testing is conducted to ensure that each construct in the research accurately reflects the values of the variables studied through evaluation of the measurement model ([Sarstedt & Liu, 2024](#)). Validity testing in this study consists of convergent validity and discriminant validity as part of the process of testing the benchmark research instrument to assess the suitability of indicators in the PLS-SEM model. Convergent validity indicates the extent of the relationship between indicators within the same construct.

Convergent validity testing is conducted by examining the outer loading and Average Variance Extracted (AVE) values. A minimum outer loading value of 0.70 is recommended, while a minimum AVE value of 0.50 is recommended. Furthermore, discriminant validity is used to ensure that each construct is clearly distinct from other constructs in the structural model, so that each construct can represent a distinct concept (Afthanorhan et al., 2021).

In addition, to assess the internal consistency of the instrument in this study, a reliability test was conducted to measure the consistency of the variables studied. A construct is considered reliable if its Cronbach's Alpha and Composite Reliability values are greater than 0.70. This value indicates that the research instrument has a good level of reliability in measuring the variables studied.

Table 3. Validity and Reliability Test Results

Indicator Items	Validity Test		Status	Reliability Test		Status
	Factor Loading	AVE		Cronbach's Alpha	Composite Reliability	
M1.1	0.806	0.638	Valid	0.719	0.841	Reliable
M1.2	0.805		Valid			
M1.3	0.785		Valid			
X1.1	0.674		Valid			
X1.2	0.724		Valid			
X1.3	0.781	0.522	Valid	0.774	0.845	Reliable
X1.4	0.684		Valid			
X1.5	0.743		Valid			
X2.1	0.830		Valid			
X2.2	0.829		Valid			
X2.3	0.790	0.612	Valid	0.836	0.886	Reliable
X2.4	0.588		Valid			
X2.5	0.846		Valid			
Y1.1	0.713		Valid			
Y1.2	0.781		Valid			
Y1.3	0.792	0.586	Valid	0.881	0.908	Reliable
Y1.4	0.832		Valid			
Y1.5	0.821		Valid			
Y1.6	0.759		Valid			
Y1.7	0.643		Valid			

Table 3 presents the validity and reliability test results; all indicators for each variable in this study have met the criteria for evaluating the measurement model. An indicator is considered valid if it has an outer loading value above 0.70 and an Average Variance Extracted (AVE) value for each construct above 0.50. This indicates that the indicator is able to represent the research construct well. From the results of the reliability test, the Cronbach's Alpha value for variable M1 is 0.719, X1 is 0.774, X2 is 0.836, and Y1 is 0.881. These values indicate that each variable has good internal consistency. In addition, the Composite Reliability value for variable M1 is 0.841, X1 is 0.845, X2 is 0.886, and Y1 is 0.908, all of which are above the minimum limit of 0.70. Therefore, it can be concluded that all constructs in this study have good reliability and are suitable for further analysis.

Table 4. Discriminant Validity

Variables	PayLater (M1)	Sales Promotion (X1)	FoMO (X2)	Impulse Buying (Y1)
M1	0.799			
X1	0.582	0.722		
X2	0.419	0.289	0.782	
Y1	0.527	0.489	0.612	0.765

Furthermore, [Table 4](#) presents the discriminant validity. The discriminant validity test is considered successful if each construct has a stronger relationship value seen in each construct compared to other constructs to test discriminant validity. Referring to the Fornell-Larcker criteria, the square root value of Average Variance Extracted (AVE) for each variable is as follows: M1 is 0.799, X1 is 0.722, X2 is 0.782, and Y1 is 0.765. These values are higher than the correlation values between other variables. Therefore, it can be concluded that each construct shows good discrimination ability, so that the measurement model in this study is recognized as valid.

Hypothesis Testing

Hypothesis testing was conducted utilizing the bootstrapping method within the PLS-SEM framework. A relationship is considered statistically significant if its T-statistic exceeds 1.96 and its p-value is less than 0.05. [Table 5](#) reveals that sales promotion ($\beta = 0.201$; $p = 0.007$), FoMO ($\beta = 0.493$; $p < 0.001$), and PayLater ($\beta = 0.207$; $p = 0.001$) all demonstrate positive and significant impacts on impulsive buying behavior. Consequently, hypotheses (H1), (H2), and (H3) are supported. Furthermore, PayLater significantly moderates the association between FoMO and impulsive buying ($\beta = 0.090$; $p = 0.045$), which provides support for H5. Conversely, the moderating influence of PayLater on the link between sales promotion and impulsive buying was not found to be significant ($\beta = -0.033$; $p = 0.374$). As a result, H4 is rejected.

R- Square (R2)

Based on the results of the structural model assessment, the R-Square figure for the impulsive buying variable (Y1) was recorded at 0.549. This indicates that the independent variables in this study, including PayLater (M1), sales promotions (X1), and FoMO (X2), can explain 54.9% of the variation in the impulsive buying variable (Y1), while the remaining 45.1% is influenced by other factors outside the research model. This figure is classified as a moderate category, indicating that the research model has a fairly good predictive ability in explaining the relationship between the variables studied ([Sabol et al., 2023](#)). Therefore, the structural model in this study can be declared suitable for use in further hypothesis testing stages. The results of structural model hypothesis testing are presented in [Table 5](#).

Table 5. Results of Structural Model Hypothesis Testing

Relationship	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values	Sig.
M1 → Y1	0.207	0.205	0.061	3.395	0.001	Accepted
M1 x X1 → Y1	-0.033	-0.029	0.037	0.890	0.374	Rejected
M1 x X2 → Y1	0.090	0.083	0.045	2.006	0.045	Accepted
X1 → Y1	0.201	0.204	0.075	2.697	0.007	Accepted
X2 → Y1	0.493	0.496	0.061	8.089	0.000	Accepted

Note: R2: Impulse buying (Y1) = 0.549

F- Square (F^2)

Table 6. Effect size test results (F^2)

Relationship Between Variables	F^2	Effect Size Category
M1 → Y1	0.040	Small
X1 → Y1	0.046	Small
X2 → Y1	0.368	Big
M1 x X1 → Y1	0.004	Very Small
M1 x X2 → Y1	0.023	Small

Table 6 shows the f^2 effect size results for each relationship in the structural model. Based on the results of the f^2 value test, it is known that each exogenous variable provides a different contribution in explaining the endogenous variable. The f^2 value is used to measure the magnitude of the influence of a construct on other constructs in the structural model. The magnitude of the influence is classified into three categories, namely a small influence if the f^2 value is 0.02, a moderate influence if it is 0.15, and a large influence if it reaches 0.35. From this study, it appears that the FoMO variable (X2) has the largest influence on the impulsive buying variable (Y1), with an f^2 value reaching 0.368, which is included in the large category. On the other hand, the PayLater variable (M1) and sales promotion (X1) show a small influence on impulsive buying (Y1) with f^2 values of 0.040 and 0.046, respectively. The moderating variable PayLater (M1) × FoMO (X2) also shows a small influence, with a value of 0.023, while the interaction of PayLater (M1) × sales promotion (X1) shows a very weak influence with a value of 0.004, so its contribution in strengthening the relationship between variables is relatively low.

DISCUSSION

The Effect of Sales Promotion on Impulsive Buying

The findings indicate that sales promotion exerts a substantial and statistically significant influence on impulsive buying behavior, thereby providing empirical corroboration for H1. Promotional incentives, such as discounts, cashback, and coupons, are capable of augmenting the propensity of Generation Z students to engage in unplanned, instantaneous acquisitions. These promotional stimuli serve to capture consumer attention and facilitate prompt purchasing decisions within online shopping environments. This observation aligns with extant literature, including investigations by Djamhari et al. (2024) and Mandolfo et al. (2022), wherein it was established that promotional endeavors are capable of stimulating impulsive buying behavior in digital marketplaces. Sales promotions operate as affective catalysts, diminishing the preeminence of rational assessment and instigating emotional reactions, consequently amplifying the propensity for impulsive acquisitions.

From a theoretical standpoint, this outcome provides support for the tenets of the SOR theory. Within this framework, sales promotions are posited as exogenous stimuli that exert an influence upon consumers' internal psychological states, such as heightened arousal or perceived immediacy, thereby culminating in impulsive purchasing behaviors. Furthermore, the findings underscore the enduring efficacy of promotional strategies as a marketing instrument for shaping consumer choices among Generation Z students in the digital environment.

The Effect of FoMO on Impulsive Buying

The findings indicate that FoMO exerts a positive and statistically significant influence on impulsive buying behavior, thereby providing support for H2. Notably, FoMO was observed to exhibit the most substantial impact within the established model, suggesting that the psychological pressure and apprehension concerning the forfeiture of trends or

commercial opportunities significantly propel Generation Z students towards immediate acquisition decisions.

This outcome corroborates the observations reported by [Hussain et al. \(2023\)](#), whose research established a direct correlation between FoMO and an elevated propensity for impulsive purchasing activities within digital environments. Individuals experiencing FoMO frequently perceive an imperative to engage in prompt action, thereby circumventing the omission of social phenomena or time-sensitive promotions.

From a theoretical perspective, FoMO is conceptualized as an intrinsic psychological condition operating within the SOR framework. In this context, exogenous stimuli, such as promotional campaigns or prevailing social currents, elicit affective responses, including anxiety or a sense of urgency. These elicited emotional states, in turn, instigate impulsive acquisition behaviors.

The Effect of PayLater on Impulsive Buying

It is revealed by the findings that PayLater exerts a positive and statistically significant influence on impulsive buying behavior, thereby substantiating hypothesis H3. The inherent convenience associated with the BNPL payment mechanism serves to mitigate the perceived financial strain at the point of sale, consequently elevating the propensity of consumers to engage in spontaneous transactions.

This observation aligns with previous investigations, specifically those conducted by [Kapoor et al. \(2022\)](#), which established that digital payment infrastructures foster an increase in impulsive purchasing tendencies through the provision of enhanced convenience and a reduction in the psychological apprehension associated with expenditure. A heightened inclination towards impulsive consumption is observed when consumers do not experience the immediate financial repercussions of an acquisition. Within the SOR theoretical framework, PayLater may be conceptualized as a facilitating factor that diminishes psychological impediments to transactional engagement, thereby augmenting the probability of impulsive behavioral responses.

The Moderating Role of PayLater on Sales Promotion

The findings indicate that PayLater does not significantly moderate the relationship between sales promotion and impulsive buying behavior, consequently necessitating the rejection of H4. This suggests that the presence of PayLater does not substantially amplify the influence of promotional activities on impulsive purchasing decisions among Generation Z students. This observation diverges from the conclusions of prior investigations, such as those by [Bandyopadhyay et al. \(2021\)](#), [Djamhari et al. \(2024\)](#), and [Kumar et al. \(2024\)](#), wherein it was posited that flexible payment mechanisms, specifically BNPL, are capable of augmenting the impact of promotional stimuli on impulsive purchasing tendencies.

A potential rationale for this outcome is that sales promotional activities inherently function as a potent stimulus, thereby rendering supplementary payment facilities less impactful in expediting impulsive acquisitions. Within the framework of the SOR theory, this implies that a synergistic interaction among all external stimuli is not invariably required to augment behavioral responses. Should a primary stimulus, such as a promotional offer, possess sufficient potency to shape consumers' internal cognitive and affective states, the introduction of an ancillary stimulus might not yield a substantial enhancement of the resultant behavioral manifestation.

The Moderating Role of PayLater on FoMO

The findings additionally demonstrate a significant moderating effect of PayLater on the association between FoMO and impulsive purchasing behavior, thereby providing support for H5. Specifically, when individuals are subjected to substantial psychological pressure stemming from FoMO and concurrently possess access to facile payment mechanisms, such as PayLater, their propensity for impulsive acquisitions is markedly amplified.

This observation aligns with prior investigations conducted by [Chen et al. \(2022\)](#), [Hussain et al. \(2023\)](#), and [Kumar et al. \(2024\)](#). These studies posit that [FoMO] exacerbates emotional urgency, compelling consumers towards spontaneous purchasing, especially when financial impediments are mitigated via adaptable payment alternatives. From a theoretical standpoint, the interplay between FoMO and PayLater elucidates the mechanism by which emotional stimuli and financial expediency can synergistically augment behavioral responses within the SOR framework. FoMO instigates emotional urgency, whereas PayLater diminishes perceived financial limitations, consequently intensifying impulsive purchasing behavior.

Theoretical Implication

The SOR theory, as originally advanced by [Mehrabian and Russell \(1974\)](#), is robustly supported by the comprehensive findings of this study. Within the framework of this theoretical construct, exogenous stimuli are posited to exert an influence upon individuals' internal psychological states, thereby eliciting subsequent behavioral manifestations.

In the context of the present investigation, both sales promotion and FoMO are identified as external stimuli, which precipitate affective reactions characterized by urgency and anxiety. These emotional responses are subsequently observed to culminate in impulsive purchasing behaviors among students belonging to Generation Z. Concurrently, PayLater operates as an enabling mechanism, mitigating perceived financial impediments and thereby intensifying impulsive reactions, especially under specific psychological circumstances, notably in the presence of FoMO.

Nevertheless, the empirical findings additionally reveal that a universal amplification of behavioral outcomes is not invariably achieved through all permutations of external stimuli. Specifically, although PayLater is observed to reinforce the effect of FoMO, its capacity to substantially augment the influence of sales promotion is not evident. This observation implies that impulsive purchasing behavior is contingent not solely upon marketing-related stimuli but also upon individuals' psychological dispositions and their perception of financial ease.

CONCLUSION

The research outcomes permit the inference that the impulsive purchasing behavior observed among Generation Z students within the digital milieu is substantially influenced by external provocations, specifically sales promotions, and by the psychological duress identified as FoMO. These observations elucidate that both marketing inducements and pressures stemming from social comparison are capable of precipitating affective reactions, which subsequently diminish judicious decision-making and thus foster a predisposition towards spontaneous acquisitions.

Moreover, FoMO was ascertained to intensify inclinations towards impulsive buying, especially when its impact was augmented by the accessibility of PayLater payment

modalities. Nevertheless, the findings concurrently demonstrated that the utilization of PayLater does not invariably amplify the influence of promotional stimuli on impulsive purchasing, thereby suggesting that the efficacy of all promotional strategies is not exclusively contingent upon installment-based payment provisions.

The SOR theory is substantiated by these findings, which illustrate that external stimuli, such as digital promotions and social trends, are capable of influencing internal psychological states, thereby precipitating impulsive consumption behavior. Nevertheless, it is also underscored by these results that the cognitive processes inherent to consumers exert a significant influence on the filtering and rationalization of such stimuli, thereby indicating that behavioral responses are not exclusively automatic.

From a practical standpoint, these findings indicate that practitioners in digital marketing ought to meticulously evaluate the ethical parameters of promotional strategies designed to capitalize on emotional triggers, such as FoMO. Concurrently, financial service providers furnishing PayLater facilities are obligated to prioritize the implementation of responsible usage mechanisms, given that simplified accessibility possesses the potential to exacerbate impulsive financial behavior under specific psychological conditions.

Subsequent investigations are advised to meticulously explore additional variables that may function as moderators or mediators, exerting an influence upon impulsive buying behavior, for instance, self-control, financial literacy, or consumer personality traits. Furthermore, the scope of inquiry could be broadened to encompass diverse consumer segments or to extend the research context beyond Generation Z students, thereby facilitating the acquisition of more comprehensive empirical insights. Additionally, comparative research endeavors, encompassing diverse national contexts or various digital payment platforms, are advocated for the purpose of augmenting the external validity of the resultant findings, particularly concerning the moderating role of PayLater in impulsive buying behavior.

LIMITATION

Several limitations inherent to this investigation warrant acknowledgment. Primarily, the employment of purposive sampling introduces a potential for sampling bias, given that the participant pool was confined exclusively to Generation Z students actively utilizing PayLater. Consequently, the representativeness of the sample is constrained, potentially failing to comprehensively mirror the wider demographic of digital consumers.

Secondly, the geographical scope of this research was restricted to participants within Indonesia. This circumscribes the generalizability of the conclusions to international contexts, particularly those characterized by divergent cultural frameworks, varying degrees of financial literacy, and distinct patterns of digital payment adoption.

Thirdly, the present inquiry concentrated on generalized impulsive purchasing behaviors within digital environments, without differentiating among specific product categories or brands. It is plausible that consumer reactions exhibit variability contingent upon product type, industry sector, or the degree of consumer involvement, aspects which were not integrated into the current analytical model.

Finally, a number of potentially significant variables, including but not limited to financial literacy, self-control, and social identity, were not incorporated into the developed research model. These elements are posited to exert a substantial influence on the

formation of PayLater utilization patterns and in ameliorating the impacts of sales promotions and FoMO.

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DECLARATION OF CONFLICTING INTERESTS

The authors have declared no potential conflicts of interest concerning the study, authorship, and/or publication of this article.

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