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Research Article

The Influence of Discounts on the Shopee E-Commerce Platform and Financial Discipline on Impulse Buying Behavior

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ABSTRACT

The current study examined the nexus between Shopee online discount strategies and impulsive buying behavior among university students, with financial discipline explored as a potential moderator. More prevalent are flash sales, vouchers and gamified promotions in online shopping platforms that can induce impulsive buying behavior, especially among young people. A quantitative descriptive-correlational design was used with a structured survey questionnaire to 456 university students in Cebu City. The questionnaire measured three constructs quantitatively; exposure to Shopee discount, tendency to buy impulsively and financial discipline. Hierarchical multiple regression was used to test the direct effects of Shopee discount exposure, financial discipline, and the interaction of the two on impulse buying behavior. The results indicated that exposure to online discount of Shopee significantly predicted impulsive buying tendency ($B = 0.41$, $p<.001$) with about 15% of variance. The final model, which included financial discipline, their interaction and online discount exposure from Shopee, explained about 20.6% of the variance. Discount exposure was still positively associated with impulsive buying tendency ($B=0.45$, $p<.001$) and financial discipline had a significant negative association ($B=-0.33$, $p<.001$). However, the interaction term between mean-centered discount exposure and financial discipline scores was not statistically significant ($B = -0.05$, *p* = 0.518). Thus, financial discipline was related to lower impulsive buying tendency in general, but it did not significantly moderate the relationship between the exposure to online discount on Shopee and impulsive buying tendency. Future research should examine other possible moderators and interventions to improve financial self-regulation.

Keywords: *E-commerce Promotions, Financial Discipline, Impulse Buying Behavior, Online Shopping Discounts, Shopee Platform, Student Consumer Behavior, Vouchers and Flash Sales*

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Introduction

Online shopping websites are inseparable parts of the daily shopping pattern for consumers in the developing digital commerce in the Philippines where young adults and college students increasingly rely on mobile apps since they are easy, affordable, and readily available (Business of Apps, 2025). Of these platforms, Shopee is perhaps the most successful e-commerce market in Southeast Asia that has changed the face of traditional purchasing with its convenient interface and extremely active digital marketing policy. Shopee has been able to capitalize on this trend with price-cuts, flash sales, vouchers, coin incentives, and promotional activities based on time. Its strategies, however, are designed to keep the user interested and create repetitive purchases (Nastiti, 2020; Rahmania et al., 2023). These marketing strategies, often infused into a gamified format such as countdown timers, daily check-ins, and interactive in-app activities generate a sense of urgency and excitement with a significant effect on the decision-making of young consumers (Dhea, 2025; Widodo & Kurniawan, 2025).

The discount-based culture on Shopee has made a significant dent in online shopping decision and purchase intentions on a psychological basis as college students are growing into online shopping in education and private life. Recent research also indicates that the emotional arousal, perceived product value, and hedonic motives related to pleasure and immediate gratification are likely to be elevated by promotional signals, such as limited-time offers, visible price reductions, bundled offers, and free shipping vouchers (Imbayani & Gama, 2024; Kathuria & Bakshi, 2024; Lamis et al., 2022; Paulino et al., 2025). These psychological stimuli are believed to hinder the decision-making process and lead consumers to be more likely to impulse buy, especially when the lower prices are touted as exclusive deals or offers. With the youth segment (influenced on buying behaviours by friends, on social media, and on financial constraints) they may even strengthen an impulse purchase even more and significantly change the social financial habits.

Other research shows that sales through online discount and promotion techniques are a strong factor in the influence of impulse buying behavior (Fernandez et al., 2022; Hendrasto, 2022; Punzalan, 2024; Wang & Chapa, 2022), and financial literacy is a determinant in impulsive consumption (Jabar & Delayco, 2021; Sarmiento, 2024). Few, however, have looked at how financial discipline — including budgeting, self-restraint and smart use of money — tempers this relationship. To address this gap, the current study examined whether the strength of the relationship between Shopee discount exposure and impulse buying behavior varies according to students' level of financial discipline. The study is on college students of Cebu City, Philippines, where there is an abundance of Shopee services and thus knowledge of consumer trend and financial inclusion in youth are revealed.

This research is intended to fill the gap of research regarding the association between price discount for online shopping with impulsive buying behavior among college students. It looks at how discounts of Shopee's flash sales, vouchers, free shipping, social media advertisements, and price comparison influence purchasing decisions. Furthermore, it investigates whether financial discipline to the extent that it is the process of budgeting, thinking ahead of one's needs, controlling oneself, and controlling costs, moderates this relationship. Specifically, the study aims to answer: (1) How exposed are university students to discounts on Shopee? (2) How much does an impulse purchase take place when a discount of this sort is made to students? (3) How disciplined are the students about money management? (4) Is there a significant relationship between Shopee discounts and impulse buying? (5) Does financial discipline moderate this relationship? The null hypotheses are: (1) There is no significant relationship between Shopee discounts and impulse buying. (2) The relationship between Shopee discounts and impulse buying is not significantly moderated by financial discipline.

Conceptual relationship among the three main variables studied is shown in Figure 1. The image shows viscerally how exposure to

Shopee online discounts is associated with consumers' impulsive buying behavior induced by these promotional offers. Simultaneously, financial discipline is placed with these variables to highlight its role within the model. The diagram illustrates the correlation of financial discipline with discount exposure and impulsive buying behavior in a more structured way of how the two important independent variables are related and interconnected.

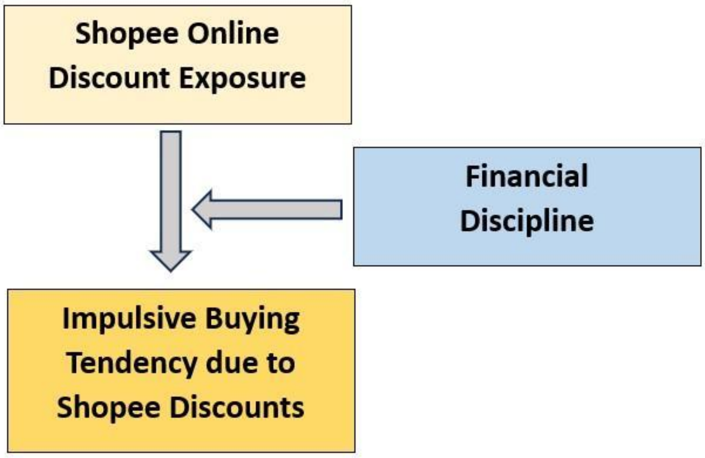

Figure 1. Conceptual Model of the Relationship Among Shopee Online Discount Exposure, Financial Discipline, and Impulsive Buying Tendency

In this study, Shopee discount exposure stimulates impulsive buying behavior, where there is evidence of how repeated exposure to promotions might cause a person to make impulsive purchases. Financial discipline is positioned as a moderator, meaning that it is expected to change the strength of the relationship between Shopee discount exposure and impulse buying behavior rather than transmit or explain the effect of discount exposure.

Methodology

Research Design and Respondents

Respondents and study design. By using the quantitative descriptive-correlational design, the researchers analyzed the relationship between Shopee online discounts (independent variable) and impulse buying behavior (dependent variable) in a study environment with financial discipline as a moderating variable. This study was conducted solely for academic and research purposes, and the researchers declare no affiliation, partnership, or financial relationship with Shopee; the platform is mentioned strictly as the context of analysis and not as an endorsement. The descriptive component of the study assessed three central metrics, including exposure to Shopee online discounts, impulse buying propensity among university students, and financial discipline. The inferential component tested the direct relationship between Shopee online discount exposure and impulse buying behavior and examined whether that relationship changed across levels of financial discipline through an interaction term between discount exposure and financial discipline. A quantitative analysis of survey data from the structured forms created using Google Forms. This construction is fitting because it allows for specific but measurable results that are objective and quantifiable but also the possibility of discovering present day attitudes and behaviors of Shopee online discounts, impulse buying and financial responsibility. This study was done in Cebu City, Philippines. The research had 456 subjects who had volunteered to join. The sampling method used was voluntary response sampling (when they decided to complete the questionnaires). This study is conducted for academic purposes only. The researchers are not affiliated with Shopee, and the platform is mentioned solely as the context of analysis.

Instruments

The questionnaire was twofold. Part one was an eligibility verification to confirm that the respondents were eligible to participate in the study, ie: currently enrolled university students and active users of Shopee platform. The second segment included 15 items (interim questionnaire) grouped in three parts (independent variable: Shopee online discounts, dependent variable: Impulse Buying Behavior, and moderating variable: Financial Discipline). Each section had five items rated on a four-point Likert scale (1 = Strongly Disagree to 4 = Strongly Agree). The data reliability checks for the collected datasets produced coefficients of .8073 on the exposure to online discounts at Shopee, .8220 for impulse buying preference of Shopee discounts, and .7976 for monetary control, all indicating strong internal consistency.

The responses to Shopee discount exposure in the present questionnaire come from a new study. Studies suggest that consumers often visit Shopee seeking promotions and deals (Ramdani et al., 2025). Buyers have been effectively captured and engaged by flash sales, vouchers, and free shipping (Arubusman, 2024). It has also been shown that users visit Shopee more frequently during large sales, especially flash promotion, which enhances impulse purchasing (Nguyen-Van et al., 2024). Consumers are highly motivated to search in favour of a discount from social media and friends and influenced by influencer marketing and peer recommendations which influence the buying decisions (Gonçalves et al., 2024; Dzreke & Dzreke, 2025). Shopee shoppers also find better prices through comparing deals with other platforms that they find on their shopping list (Li & Chen, 2024). So, these findings are used in development of questionnaire items.

The findings regarding impulsive buying related to exposure to Shopee discounts are based on research. Research has indicated how discounts may cause individuals to purchase items they did not intend to (Nguyen-Van et al., 2024). Consumer purchases of items beyond their budget can be driven, in part, by price promotions and flash sales (Arubusman, 2024; Ramdani et al., 2025). Other studies reveal that shoppers get excited or pressured when online sales promote, which also leads them to impulsive shopping (Gonçalves et al., 2024). Consumers regret purchases, especially during large sales events after these (Dzreke & Dzreke, 2025; Li & Chen, 2024). These results informed the questionnaire questions.

The statements about financial discipline as a moderator are based on recent research. Studies indicate that establishing and adhering to a monthly shopping budget helps to rein in consumer overspending within online shopping (Ramdani et al., 2025). We also suggest saving money before purchasing luxuries, as a means for being a responsible consumer (Sinnewe & Nicholson, 2023). Studies emphasize verifying whether an item is a need or want before buying goods to prevent impulsive buying (Islam et al., 2021). Overspending is associated with self-control and financial planning in large sales events (Islam et al., 2021). Finally, prioritizing necessities like school as well as the total cost of living before discretionary purchases is considered a critical component of disciplined living habits (Bai, 2023; Lukas & Howard, 2023). Such findings guided the development of the items used in the questionnaire.

Data Analysis

To study survey information gathered from interviewees, I used both descriptive and inferential statistical methodologies. Descriptive statistics, mainly mean computation, were used to describe Shopee online discount exposure, impulsive buying behavior, and financial discipline. Hierarchical multiple regression was used to test the proposed moderating role of financial discipline. In Model 1, Shopee online discount exposure was entered as a predictor of impulse buying behavior. In Model 2, financial discipline was added to estimate its main effect. Before creating the interaction term, the discount-exposure and financial-discipline scores were mean-centered. In Model 3, the interaction term between discount exposure and financial discipline was entered. Financial discipline was considered a moderator only when the interaction coefficient was statistically significant.

Ethical Considerations and Data Collection

All participants had been fully informed of the study aims, scope, and risks. Data were collected in an anonymous way, and no personally identifiable information was logged. Participation was fully voluntary; respondents had every right to withdraw at any time without penalty. The study followed the ethical standards mentioned in the APA Ethics Code (2017), with a focus on informed consent, confidentiality, and the safe management of personal data. For the purpose of this research, participants read an informed consent form which described the objective and voluntary nature of the research, as well as the assurance of confidentiality, prior to filling out the questionnaire.

Results and Discussions

Shopee Online Discount Exposure

Table 1 indicates mean scores of agreement with the statements of Shopee online discount exposure for respondents. Five indicators are presented in the table to quantify behaviors such as checking Shopee for deals, attraction to flash sales and vouchers, browsing during big sale events, influence from social media and friends, and comparing Shopee deals with other platforms. It also provides an overall average mean score.

Table 1. Means and Levels of Agreements of Shopee Online Discount Exposure

Shopee Online Discount Exposure	Means	Interpretation
1. I regularly check Shopee for deals.	3.12	Agree
2. Flash sales, vouchers, and free shipping attract me.	3.35	Strongly Agree
3. I browse Shopee more during big sale events.	3.06	Agree
4. Social media and friends influence me to look for Shopee discounts.	2.91	Agree
5. I compare Shopee deals with other online platforms.	3.33	Strongly Agree
Average	3.15	Agree

Note. Interpretation of mean scores: 1.00-1.75 = Strongly Disagree; 1.76-2.50 = Disagree; 2.51-3.25 = Agree; 3.26-4.00 = Strongly Agree.

Results indicate that the majority of respondents agreed with most statements of Shopee online discount exposure. The highest mean score (3.35) shows high agreement that flash sales, vouchers, and free shipping attract respondents, whereas the strong agreement with Shopee deals in comparison to other platforms is also given (3.33). Other behaviors such as routinely browsing Shopee for deals (3.12), browsing during big sale events (3.06), and being swayed by social media and friends (2.91) were measured as “Agree.” This average mean score of 3.15 reflects that respondents perceive Shopee discounts and promotions to be moderately exposed.

The results indicated in Table 1 suggest that promotional strategies of Shopee are important influence factors in consumer behavior. As the above findings indicate, the flash sales, vouchers, and free shipping in particular, were highly regarded by the respondents as attractive tactics used by Shopee to capture the attention of buyers, encouraging people to buy (Ramdani et al., 2025). Likewise, we find that Shopee has a very high agreement for comparison of deals to different platforms, illustrating that consumers are willing to look for value and other options ahead of buying, which is a trend in comparison between prices in online shopping (Li & Chen, 2024). Their agreement on visiting Shopee on a frequency basis to check for deals and browsing more during big sale days indicates the impact of discount-driven marketing on shopping frequency (Islam et al., 2021). Furthermore, social media and peer influences were also mentioned, where the majority of the participants stated that it motivates them to search for Shopee discounts, thereby contributing to the literature about social networks and influencers and purchase intentions (Gonçalves et al., 2024). These results generally demonstrate that the discount strategies and social influence structures of Shopee are good tools to promote consumers’ interest and buying intention.

Financial Discipline

Table 2 presents the respondents' mean scores for the different indicators of financial discipline. The table enumerates five behavior indicators which measure: setting and sticking to a monthly online shopping budget; saving before buying non-essential items; checking whether an item is a need or a want; avoiding overspending during big Shopee sales; and prioritizing school and living expenses before Shopee purchases. An overall average mean score is also included.

Table 2. Means and Levels of Agreements of Financial Discipline

Financial Discipline	Means	Interpretation
1. I set and stick to a monthly online shopping budget.	2.76	Agree
2. I save money before buying non-essential items.	3.28	Strongly Agree
3. I check if an item is a need or a want before buying.	3.40	Strongly Agree
4. I avoid overspending even during big Shopee sales.	3.30	Strongly Agree
5. I prioritize school and living expenses before Shopee purchases.	3.51	Strongly Agree
Average	3.25	Agree

Note. Interpretation of mean scores: 1.00-1.75 = Strongly Disagree; 1.76-2.50 = Disagree; 2.51-3.25 = Agree; 3.26-4.00 = Strongly Agree.

Results reveal that respondents are generally perceived to have high levels of financial discipline. The strongest mean score (3.51) indicates high agreement among the respondents that school and living expenses come before Shopee purchases. The agreement with others such as checking whether the item is a need or want (3.40), avoiding overspending during major Shopee sales (3.30), and saving money before purchasing non-essential or non-necessity items (3.28) are also supported by a large proportion of the respondents. Establishing and adhering to a monthly online shopping budget (2.76) was rated "Agree," a little lower than the others. With an overall average of 3.25, this may indicate that respondents possess a high level of financial discipline, which might help to curtail impulsive purchasing behavior.

These results suggest that the majority of respondents are also practicing responsible financial behaviors such as putting priority on necessary spending and displaying moderate control at promotional events. This great financial sensibility can serve as an insurance against reckless shopping reactions to reductions and sales. It also implies that education programmes focusing on budgeting and need-based purchasing behavior may help reinforce these practices. There is strong empirical evidence that financial literacy and self-control are key characteristics of financial well-being and can prevent consumers from being over-exposed in the online environment to shopping (Sinnewe & Nicholson, 2023; Bai, 2023; Lukas & Howard, 2023).

Impulsive Buying Tendency due to Shopee Discounts Exposure

Table 3 shows average responses for consensus regarding impulsive buying tendencies as affected by Shopee discounts. The five indicator forms that measure different aspects of impulsive buying behaviour are included in the table, including buying discounted stuff without the intention to buy, buying items which actually are not needed, purchases over budget, and feeling excitement or perceived pressure due to promotional offers. It also looks at reactions that follow purchase, especially about regret after impulsive buying choices. An overall average mean score is provided to summarize respondents' general inclination toward impulsive buying driven by online discount promotions.

Table 3. Means and Levels of Agreements of Impulsive Buying Tendency

Impulsive Buying Tendency	**Means**	**Interpretation**
1. I buy discounted items even if I didn't plan to.	2.43	Disagree

Impulsive Buying Tendency	Means	Interpretation
2. Discounts make me buy things I don't really need.	2.48	Disagree
3. I often spend more than my budget because of discounts.	2.53	Agree
4. I feel excited or pressured when I see Shopee promos.	2.39	Disagree
5. I sometimes regret impulsive purchases during Shopee sales.	2.73	Agree
Average	2.51	Agree

Note. Interpretation of mean scores: 1.00-1.75 = Strongly Disagree; 1.76-2.50 = Disagree; 2.51-3.25 = Agree; 3.26-4.00 = Strongly Agree.

This shows that respondents tend to be moderately impulsive and buy without notice after seeing Shopee discounts. The top mean score (2.73) indicates that some participants regret any impulsive purchases they made during Shopee sales, while overspending beyond budget (2.53) also received an "Agree" designation. But most others, including unplanned purchases of discounted items (2.43), purchasing things not really needed (2.48) and excitement or pressure from promos for Shopee (2.39), received a "Disagree" score.

The results indicate that Shopee discounted shopping has a weak effect on impulsive buying behaviour. Most say they do not buy the items they did not plan for and do not feel pressured by promotions, although they do sometimes overspend and feel regret after buying them. That is, both impulsive purchase exists yet is not overwhelming but consumers hold control over their buying. On the minus side, both the agreement on overspend and post-purchase regret reveal, that discounts can still trigger unplanned financial decisions, especially during major sale events. These findings suggest the importance of e-commerce platforms and consumers in encouraging responsible shopping behaviour and the improvement on economic discipline to prevent the negative impact of impulse purchase (Islam et al., 2021; Nguyen-Van et al., 2024; Gonçalves et al., 2024).

Shopee Online Discounts and Impulsive Buying Tendency

***Model Summary*.**

Table 4 shows the regression statistics for Shopee online discounts on impulsive buying tendency. The table summarizes the key statistical metrics created from the regression analysis such as Multiple R, R^2, Adjusted R^2, standard error of the estimate, and the number of observations in the model. Based on responses from 456 participants, these statistics summarize the model's overall fit and computational parameters to form the quantitative basis for future analysis.

Table 4. Regression Statistics for Shopee Online Discounts and Impulsive Buying Tendency

Statistic	*Value*
Multiple R	0.38
R^2	0.15
Adjusted R^2	0.15
Standard Error	0.61
Observations	456

The Multiple R of 0.38 means that there is a small to moderate linear, positive relationship between the online discount and impulsive buying tendency. The R^2 of 0.15 suggests the model explains about 15% of the variance in impulsive buying, and so most variance is driven by other variables that are not estimated herein. That the Adjusted R^2 does not change (0.15) indicates little overfitting, and that the model complexity is suitable for the data. The Standard Error of 0.61 implies that predictions usually will deviate from the actual value by around 0.61 units on the outcome's scale, with this deviation to be taken as an estimate relative to how the outcome value is defined as a dependent variable. With 456 observations, the estimates are likely stable, but overall the explanatory power of the model seems modest.

ANOVA.

Table 5 summarizes the ANOVA for a regression analysis conducted on Shopee online discounts and impulsive buying tendency. The table shows the distribution of variance in the regression model, residuals, and total components. It comprises the degrees of freedom, sums of squares, mean squares, computed F-value, and significance level. These details summarize the components of the model and the overall variation observed in the data set.

Table 5. ANOVA Summary for Shopee Online Discounts and Impulsive Buying Tendency

Source	*df*	*SS*	*MS*	*F*	*Significance F*
Regression	1	29.50	29.50	78.79	1.61×10^{-17}
Residual	454	169.97	0.37		
Total	455	199.46			

From the ANOVA, the regression model is statistically significant (F = 78.79, p = 1.61×10^{-17}), which means that Shopee online discounts are a meaningful predictor of impulsive buying tendency for this sample. With one degree of freedom for Regression, the model uses only one predictor. The larger F-statistic shows that the ratio of mean squares (29.50 / 0.37) indicates our model is capturing a part of variability in the outcome, which agrees with your regression statistics. The residual mean square (~0.37) is an indication of average unexplained variance per degree of freedom: Although the predictor helps us explain impulsive buying, a substantial portion of variance remains due to other factors. The total degrees of freedom (455) gives an assumption for 456 observations, providing stable estimates.

Coefficients

The regression coefficients of the analysis on Shopee online discounts and impulsive buying tendency are shown in Table 6. The table provides the unstandardized estimated coefficients associated with the predictor(s): their standard errors, t-values, and p-values. It also reports the intercept term and the lower and upper bounds of the 95% confidence intervals for each coefficient. These statistical components present a full accounting of the regression parameters obtained from the model's estimation.

Table 6. Regression Coefficients for Shopee Online Discounts and Impulsive Buying Tendency

Predictor	*B*	*SE*	*t*	*p*	*95% CI Lower*	*95% CI Upper*
Intercept	1.20	0.15	8.02	< .001	0.91	1.50
Shopee Discounts	0.41	0.05	8.88	< .001	0.32	0.51

The Intercept of 1.20 is the expected level of impulsive buying tendency when Shopee discounts are equal to 0. The coefficient for Shopee Discounts (B = 0.41) indicates that impulsive buying tendency increases by 0.41 units on average for each one-unit increase in the discount measure. From these t-values (8.02 for the Intercept and 8.88 for Discounts), p-values < .001 demonstrate that both estimates are statistically significant. The 95% confidence interval of 0.32 to 0.51 for the discount effect does not include zero, indicating that the association is positively consistent. The small standard error (0.05) indicates a rather accurate estimation of the discount effect.

Implications

Tables 4, 5, and 6 summarize the implications of the interaction between the online discount offered by Shopee and impulsive purchasing tendencies. The findings reveal that online discounts on Shopee have a substantial impact on impulsive buying, although they explain only a portion of the underlying behavior. It can be shown that this holds by previous work which also finds discount prices to play a predominant role in impulse buying, often due to emotional arousal (Rani & Catherine, 2023; Syarifah Roviqoh & Supriati, 2022). Nevertheless, due to the many other factors that provoke impulse purchases, coupling discount incentives with scarcity-related cues—including flash sales or countdown timers—has the potential to heighten consumer arousal and purchasing urgency (Lamis et al., 2022). Marketers, therefore, must create promotions that match attractive discounts with timely, emotionally arresting triggers, with a view to nudging impulsive purchases while being ethical.

Hierarchical Regression and Moderation Analysis

Model Summary

Table 7 shows the model summary of the regression analysis for Shopee online discounts exposure, financial discipline, and impulsive buying tendency. It also presents a summary table of the statistical metrics described in these results. These include the multiple correlation coefficient, the coefficient of determination, the adjusted coefficient of determination, and the standard error of the estimate. Furthermore, the table shows the total number of observations included in the analysis and summarizes the model's basic statistical characteristics.

Table 7. Model Summary for Shopee Online Discounts Exposure and Financial Discipline and Impulsive Buying Tendency

Statistic	*Value*
Multiple R	0.45
R^2	0.21
Adjusted R^2	0.20
Standard Error	0.59
Observations	456

The Multiple R (0.45) indicates that the overall fit between the model predictions and the individual impulsive buying scores is at some moderate level. With an R^2 of 0.21, the predictors explain around 21% variance in the pattern of impulsive buying, indicating relatively moderate but not exhaustive explanatory validity. The Adjusted R^2 of 0.20 is close to R^2, indicating that the complexity of the model is adequate and most probably generalizes well to similar samples. The Standard Error of 0.59 shows that on average predicted scores differ from the real scores by about 0.59 units on the outcome's scale; the practical magnitude of this error should be compared to the measurement range of the dependent variable. The estimates are reliable with 456 observations. Statistical significance of the total model and individual predictors cannot be confirmed through the summary alone; significance is checked using the ANOVA table and coefficient p-values.

ANOVA

Table 8 presents the ANOVA summary for the regression analysis involving Shopee online discounts exposure, financial discipline, and impulsive buying tendency. The total variation of the dependent variable in the table represents how it is distributed among the regression model and residual component. The degrees of freedom, sums of squares, and mean squares are reported for every source of variation. The calculated F-statistic, in addition to its significance level, shows a good overview, providing a structured approach for how the variance components of the regression model relate to it.

Table 8. ANOVA Summary for Shopee Online Discounts Exposure and Financial Discipline and Impulsive Buying Tendency

Source	*df*	*SS*	*MS*	*F*	*Significance F*
Regression	2	40.97	20.49	58.55	< .001

Source	*df*	*SS*	*MS*	*F*	*Significance F*
Residual	453	158.49	0.35		
Total	455	199.46			

The ANOVA shows that the aggregated regression model is significant in the overall category (F = 58.55, p < .001) which indicates that Shopee discount exposure and financial discipline together explain a significant proportion of the variance in impulsive buying tendency. A high mean square (20.49 / 0.35), showing a large F, also means the predictors will act together to improve our model fit compared with those without predictors. Because this model includes only the two main effects and no interaction term, it serves as the baseline model and does not by itself test moderation. The 455 total df corresponds to 456 observations, indicating that prediction stability was achieved and that the fit agreement with the model summary ($R^2 \approx 0.21$ in Table 7) can be established.

Coefficients

Table 9 shows coefficients of all the model to study Shopee discounts online and financial discipline in association with impulsive buying tendency. The table consists of the predictor values contained in the regression analysis and intercept term. It shows the unstandardized coefficient estimates, standard errors, t-values, and p-values for the variables. Also, in this table the 95% confidence interval coefficient estimates are presented which is the statistical summary of the parameterization obtained directly from the regression analysis.

The Intercept of 2.13 tells the impulsive buying tendency expected when Shopee discount exposure and financial discipline are equal to zero. For Shopee Discounts (B = 0.45), the data suggests that the greater the discount exposure, the stronger the impact on impulsive buying tendency. On the contrary, the coefficient for Financial Discipline (B = -0.32) exhibits a significant negative correlation, indicating that financial discipline reduces the impulsive buying tendency. Both predictors (p < .001) and their confidence intervals do not incorporate zero, again indicating the robustness of these impacts. These coefficients show that Shopee discount exposure and financial discipline are independently associated with impulse buying tendency. However, the main effects alone do not establish that financial discipline changes the effect of discount exposure.

Table 9. Regression Coefficients for Shopee Online Discounts Exposure and Financial Discipline and Impulsive Buying Tendency

Predictor	*B*	*SE*	*t*	*p*	*95% CI Lower*	*95% CI Upper*
Intercept	2.13	0.22	9.81	< .001	1.70	2.56
Shopee Discounts	0.45	0.05	9.89	< .001	0.36	0.54
Financial Discipline	-0.32	0.06	-5.73	< .001	-0.43	-0.21

Implications

Tables 7, 8, and 9 present the main-effects model involving Shopee online discount exposure and financial discipline. Together, the two predictors explain approximately 21.3% of the variance in impulsive buying tendency. Shopee online discount exposure has a significant positive association with impulsive buying tendency, while financial discipline has a significant negative association. However, because this model does not include the interaction term, it establishes only the independent associations of the two predictors and does not demonstrate moderation. The interaction between discount exposure and financial discipline is examined in the succeeding analysis.

Moderation Analysis of Financial Discipline in the Relationship Between Shopee Online Discount Exposure and Impulsive Buying Tendency

We tested for moderation by constructing an interaction term using mean-centred scores for Shopee online discount exposure and financial discipline. It is common to examine whether a third variable moderates the association between an independent variable and an outcome in a regression by including an interaction term (Hayes & Rockwood, 2020; Rimpler et al., 2025).

Model Summary

The model summary of the moderation analysis to assess whether financial discipline moderates the relationship between Shopee online discount exposure and impulsive buying tendency is shown in Table 10. The model uses Shopee online discount exposure, financial discipline and the interaction term to predict impulsive buying tendency. The table gives the multiple correlation coefficient, the coefficient of determination, the adjusted coefficient of determination, the standard error of the estimate and the number of observations.

The Multiple R was 0.454, indicating a moderate overall relationship between the model's predicted values and the respondents' observed impulsive buying tendency scores. The R^2 value of 0.206 implies that the variance of impulsive buying tendency can be explained by Shopee online discount exposure, financial discipline, and their interaction which is approximately 20.6%. The other 79.4% is attributable to other factors not included in the model.

Table 10. Model Summary for the Moderation Analysis of Financial Discipline Between Shopee Online Discount Exposure and Impulsive Buying Tendency

Statistic	*Value*
Multiple R	0.45
R^2	0.21
Adjusted R^2	0.2
Standard Error	0.59
Observations	456

The adjusted R^2 of 0.201 suggests that the model accounts for approximately 20.1% of the variability, considering the number of predictors in the model. The Standard Error of 0.592 indicates that the predicted scores of impulsive buying tendency are different from the observed scores by about 0.59 scale units. The model was estimated on 456 observations. However, the model summary does not prove whether financial discipline significantly moderates the relationship or not. This has to be inferred from the significance of the interaction term in Table 12.

ANOVA

The result of ANOVA for the regression model of testing the possible moderating effect of financial discipline on the relationship of Shopee online discount exposure and impulsive buying tendency is presented in Table 11. The table shows the total variation in the impulsive buying tendency and its split into the variation explained by the regression model and the unexplained residual variation. It also gives the degrees of freedom, sum of squares, mean squares, F-statistic and significance level used to test the overall statistical significance of the model.

Table 11. *ANOVA Summary for the Moderation Analysis of Financial Discipline Between Shopee Online Discount Exposure and Impulsive Buying Tendency*

Source	*df*	*SS*	*MS*	*F*	*Significance F*
Regression	3	41.12	13.71	39.12	1.71E-22
Residual	452	158.34	0.35		
Total	455	199.46			

The ANOVA results show that the overall regression model was statistically significant, F (3,452) = 39.13, p<.001. This means that the effect of Shopee online discount exposure, financial discipline, and the interaction term of both, is a statistically significant predictor of impulsive buying tendency.

The regression sum of squares is 41.12 which is the variation explained by the model; the residual sum of squares is 158.34 which is the variation left unexplained. The ratio of regression and total sums of squares is consistent with the R^2 of 0.21 reported in Table 10 confirming the model explains about 20.6% of variance in impulsive buying tendency.

But just because the overall model is statistically significant, it does not mean that financial discipline is a significant moderator. The presence or absence of moderation depends on the coefficient and p-value of the interaction term, reported in Table 12.

Coefficients

Table 12 displays the regression coefficient of the model testing the moderation effect of financial discipline on the relationship between exposure to Shopee online discounts and the impulsive buying tendency. It reports the unstandardized coefficient, standard error, t-statistic, p-value and 95% confidence interval for Shopee online discount exposure, financial discipline, and their interaction term. The interaction term is the main basis for decision making whether financial discipline has a significant impact on the relationship between discount exposure and impulsive buying tendency.

The intercept of 2.16 is the predicted impulsive buying tendency score when the mean-centered values of Shopee online discount exposure and financial discipline are zero. Practically this means respondents with average degrees of discount exposure and financial discipline.

Table 12. Regression Coefficients for the Moderation Analysis of Financial Discipline Between Shopee Online Discount Exposure and Impulsive Buying Tendency

Predictor	*B*	*SE*	*t*	*p*	*95% CI Lower*	*95% CI Upper*
Intercept	2.16	0.22	9.71	<0.001	1.72	2.60
Shopee Discounts	0.45	0.05	9.78	<0.001	0.36	0.54
Financial Discipline	-0.33	0.06	-5.75	<0.001	-0.44	-0.21
Shopee Discounts × Financial Discipline (Mean-Centered)	-0.05	0.07	-0.68	0.518	-0.19	1.00

The online discount exposure on Shopee has a positive and significant relationship (B = 0.45, SE = 0.05, t = 9.78, p<.001). Thus, the estimated 0.45 unit increase in impulsive buying tendency at the average level of financial discipline is associated with one unit increase in Shopee online discount exposure.

The coefficient for financial discipline is statistically significant and negative (B = -0.33, SE = 0.06, t = -5.75, p < .001). Thus, at the mean level of Shopee online discount exposure, a one unit increase in financial discipline is associated with an estimated 0.33 unit increase in impulsive buying tendency.

The interaction effect of financial discipline and exposure to online discount, however, is not significant (B = -0.05, SE = 0.07, t = -0.65, p =.518). The 95% confidence interval also includes approximately zero demonstrating that the interaction effect is not statistically significantly different from zero. The results did not support the argument that financial discipline moderates the relationship between exposure to Shopee online discount and impulsive buying tendency.

The results show that financial discipline has a significant negative direct effect on impulsive buying tendency, but it does not have a significant moderating effect on the relationship between discount exposure and impulsive buying tendency. Therefore, it appears that financial discipline is an independent predictor of impulsive buying tendency and not a significant moderator in the present model. This result is in line with the typical moderation procedure where the statistical significance of the interaction term is evidence for moderation (Hayes & Rockwood, 2020; Rimpler et al., 2025).

Implications

Table 10, 11 and 12 shows the result of significant explanation of tendency of impulsive buying with exposure to online discounts in Shopee, financial discipline and interaction between them. The model accounted for 20.6% of the variance, while the remaining variance can be attributed to other consumer, situational, promotional and platform related factors identified in the literature on online impulsive buying (Anoop & Rahman, 2025).

The exposure of Shopee online discount has positive effect on impulsive buying tendency . This result supports the previous literature suggesting instant sales promotion especially with monetary or non-monetary reward, may lead to impulsive purchasing behaviour (Bandyopadhyay et al., 2021). So consumers that see nice discounts on the internet often may be more susceptible to impulse buying decisions.

In contrast, financial discipline is strongly negatively associated with the propensity to buy impulsively. Consumers are less likely to make impulse buys here, because they can control their budget and spending. As noted earlier, prior research indicates that the use of financial self-control strategies can result in less spending and more goal-directed financial choices (Davydenko et al., 2021).

However, the interaction term was not significant. It means that financial discipline was not a significant moderator of the link between Shopee online discount exposure and impulsive buying tendency. Therefore, financial discipline has to be considered as a precautionary factor independent of discount exposure. Financial education programs may still be useful to reinforce consumers' general spending discipline, but the findings here do not indicate that such discipline specifically reduces sensitivity to Shopee discounts.

Summary of Findings

The study generated three findings. Firstly, Shopee's discounting policies – like flash sales, vouchers and free shipping – are effective to attract student consumers, with participants agreeing to a high degree that these promotions affect their purchasing decisions. This is in line with previous studies indicating that time-limited discount points and gamified promotional cues enhance engagement and purchase intentions (Imbayani & Gama, 2024; Lamis et al., 2022).

Second, students were moderately impulsive buyers. Although respondents did tend to overspend and feel sorry about their purchases, they did not purchase unexpected items regularly, which indicates that impulse purchasing occurs selectively during large-scale sales. This is consistent with others who established that emotional arousal and perceived scarcity motivate impulse buying in e-commerce settings (Kathuria & Bakshi, 2024; Li et al., 2022).

Third, financial discipline was a significant negative predictor of impulsive buying tendency, but did not significantly moderate the relationship between exposure to Shopee online discounts and impulsive buying tendency. In the last model, discount exposure was still positively associated with impulsive buying tendency (B = 0.45, p<.001) and financial discipline was negatively associated with it (B = -0.33, p<.001). However, the interaction between mean-centered discount exposure and financial discipline scores was not significant (B = − 0.05, p =.518). Thus, the second null hypothesis was not rejected. The last model explained around 20.6% of the variance in impulsive buying tendency, indicating that financial discipline is an independent negative predictor, not a significant moderator.

Implications of the Study

Online discount on shopee had positive relationship with tendency of impulsive buying and negative relationship with financial discipline. The final model explained 20.6% of the variance compared to 15% explained by discount exposure alone. The interaction effect of exposure to discounts and financial discipline was not statistically significant (B = −0.05, p =.518). Therefore, the large main effect of financial discipline, rather than a moderating effect, was the main driver of the incremental variance. In this case, financial discipline was hypothesized as a unique negative predictor, not as a known buffer for Shopee discount exposure. However, financial literacy, budgeting and self-control strategies can help reduce consumers' overall tendency to impulse purchase (Bandyopadhyay et al., 2021; Suvarna & Malagi, 2025). E-commerce platforms and marketers also need to find an appropriate mix of promotional strategies and consumer-protection practices that promote responsible and informed buying.

Conclusion

The study revealed that Shopee online discount exposure was positively associated with university students' impulsive buying tendency and as a single variable, it accounted for about 15% of the variance. Shopee online discount exposure remained a significant positive predictor (B = 0.45, p <.001) in the final model while financial discipline was a significant negative predictor (B = −0.33, p<.001). The final model explained about 20.6% of the variance of impulsive buying tendency. By contrast, the interaction between mean-centered discount exposure and financial discipline scores was not statistically significant (B = −0.05, p = .518). Therefore, the null hypothesis was not rejected. Overall, financial discipline was associated with lower impulsive buying tendency but it did not significantly moderate the relationship between Shopee online discount exposure and impulsive buying tendency. These findings support financial education and responsible online promotion practices and highlight that the relationships identified should not be viewed as causal.

The findings are limited to university students in Cebu City and should not be generalized to other populations or locations without further evidence. It was based on self-reports, and may be influenced by social desirability bias. There should be longitudinal studies in future to study the change of impulsive buying over time, as well as include younger age groups and differences in income, and test several other moderating factors like financial literacy, peer influence, and psychological traits. Experimental research programs could also measure whether interventions such as budgeting apps or self-restraint prompts can be effective in curbing impulsive purchasing at online sales events.

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