

Original Article

Investigating Online Purchase Intention Among College Students: Integrating the Theory of Planned Behavior and Technology Acceptance Model

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Abstract. This study examines factors influencing college students' online purchase intention by integrating the Theory of Planned Behavior (TPB) and Technology Acceptance Model (TAM), supplemented by perceived trust and service quality. Conducted among 324 students at a rural university in the Philippines, the study used a quantitative descriptive-correlational design with stratified random sampling. Data were analyzed using weighted mean, Pearson correlation, and multiple regression. Results revealed an overall correlation of $r = .81$, with perceived behavioral control ($\beta = .35$) emerging as the strongest predictor, followed by attitude, subjective norms, and perceived ease of use. Findings indicate that behavioral factors are more influential than technological factors in rural contexts, offering actionable insights for platforms, educators, and policymakers to support safe and effective digital commerce engagement.

Keywords: *Online purchase intention; Rural consumers; Technology Acceptance Model; Theory of Planned Behavior; TikTok.*

The exponential growth of e-commerce, particularly through social commerce platforms such as TikTok, has reshaped global consumption patterns, offering greater convenience, accessibility, and product diversity compared to traditional retail formats (Alqahtani et al., 2023; Hsu et al., 2024). TikTok, through short-form videos, live selling, and algorithm-driven content, has become a dominant platform influencing purchasing behavior among young consumers.

College students represent one of the most active digital consumer segments due to their high technological literacy and frequent engagement with online platforms (Adeniran et al., 2022; Pham & Le, 2023). However, their purchase intention is shaped not only by functional platform attributes but also by social influences, personal

confidence, and contextual factors such as internet reliability and access to delivery (Lee et al., 2024). In rural areas, where infrastructure and services are often less stable, trust and service quality become critical to reducing uncertainty and encouraging transactions. Although widely applied, previous integrated models often overlook trust and service quality, even though these factors can weaken intention when platform performance is inconsistent (Bhati et al., 2022; Kamboj et al., 2021). Furthermore, most studies are conducted in urban or developed contexts, leaving gaps in understanding how these constructs operate in rural settings.

This study addresses these gaps by examining online purchase intention among college students in Cateel, Davao Oriental—a rural municipality with limited connectivity and logistics infrastructure. By integrating TAM and TPB and including perceived trust and service quality, it aims to determine which factors most strongly influence intention and how local conditions affect their relative importance. The findings will contribute to theory validation in developing regions and provide practical guidance for improving digital commerce access, trust, and responsible consumer behavior.

Given these gaps and research inquiries, this study aims to examine online purchase intention among rural college students in Cateel, Davao Oriental, by integrating the TPB and TAM frameworks. By analyzing how technological perceptions (usefulness, ease of use, enjoyment) and behavioral constructs (attitude, norms, control) interact within rural digital contexts, and accounting for trust, service quality, and demographic differences, this study contributes to the growing literature on consumer technology adoption in developing regions. The findings will provide valuable insights for e-commerce practitioners, educators, and policymakers in promoting digital inclusion, consumer trust, and responsible online shopping behaviors among the youth.

Methodology

Research Design

A quantitative descriptive-correlational design was used to describe variable levels and test associations, suitable for establishing baseline relationships in an understudied rural context (Creswell & Creswell, 2021). This cross-sectional design identifies statistical relationships but does not confirm causality; future studies using Structural Equation Modeling (SEM) are recommended to explore complex pathways.

Research Locale

The study was conducted at Davao Oriental State University – Cateel Campus (DOrSU-CC), a rural area characterized by intermittent internet access, limited delivery services, and cash-on-delivery as the preferred payment method (Melchor, 2023). This setting allows examination of how infrastructure constraints shape consumer perceptions and behavior.

Respondents and Sampling Procedure

The sample consisted of 324 officially enrolled students during the Academic Year 2025–2026, selected via stratified random sampling to ensure representation across disciplines. The inclusion criteria include full-time undergraduate students with at least one experience using TikTok, while the exclusion criteria include students without prior exposure to TikTok or those unwilling to participate. The data collection period was September 15 to October 15, 2025.

Research Instrument

A structured survey adapted from Nguyen et al. (2023) used a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). Additional items for trust and service quality were added based on Bhati et al. (2022) and Wu et al. (2024). Content validity was confirmed by three experts, yielding a Content Validity Index (CVI) of 0.92. Reliability was tested via a pilot study ($n = 30$), with Cronbach's alpha values ranging from 0.85 to 0.91, exceeding the recommended threshold of 0.70 (Hair et al., 2019).

Data Gathering Procedure

Approval was obtained from the university administration, and informed consent was secured from all participants. Surveys were distributed personally and via official channels, with instructions emphasizing anonymity and honest responses. Completed questionnaires were checked for completeness and coded for analysis.

Data Analysis

The collected data were processed and analyzed using appropriate statistical tools. The weighted mean described the level of agreement for each construct; Pearson Product-Moment Correlation tested relationships between variables; multiple regression analysis identified significant predictors, with assumptions of normality, linearity, and multicollinearity verified ($VIF < 3.0$); and One-way ANOVA and independent t-tests assessed differences across demographic groups. All tests used a significance level of $p < .05$.

Ethical Considerations

Ethical standards were strictly followed in all phases of the research. Participation was entirely voluntary, and respondents had the right to withdraw at any time without penalty. All data collected were treated with utmost confidentiality and used solely for academic purposes. The study did not involve any deceptive practices, and potential risks to participants were minimal. Furthermore, proper acknowledgment and citation were made for all sources, adapted instruments, and related literature to uphold academic integrity.

Results and Discussion

Level of Theory of Planned Behavior (TPB) Constructs

Table 1. *Level of Theory of Planned Behavior (TPB) Constructs*

Constructs	Mean	SD	Interpretation
Attitude Toward Online Shopping	3.92	0.75	High
Subjective Norms	3.76	0.75	High
Perceived Behavioral Control	4.11	0.69	High
Overall	3.93	0.64	High

Results revealed that college students exhibited a high level of agreement regarding all TPB constructs. Specifically, *Attitude toward Online Shopping* obtained a high mean, indicating that students generally view online shopping via TikTok as a positive, beneficial, and convenient activity. They perceive it as an enjoyable way to access a wide variety of products and deals. This finding aligns with Santos et al. (2024), who noted that in social commerce settings, attitude is largely shaped by the perceived benefits and experiential value of the platform. Similarly, Nguyen et al. (2023) emphasized that favorable attitudes strongly drive consumer behavior in digital environments, as users form positive evaluations when the platform meets their functional and emotional needs.

Subjective Norms also registered a high level, suggesting that social influences such as recommendations from friends, family, peers, and social media influencers significantly shape students' purchasing decisions. This supports the findings of Rahaman et al. (2022), who observed that electronic word-of-mouth and social pressure are critical determinants of intention among young consumers. In the context of TikTok, where content is often shared and endorsed by known personalities or peers, the social component becomes a powerful driver of behavior. This is consistent with Hagger and Ajzen's (2022) view that the perceived expectations of important referent groups deeply influence human behavior.

Similarly, *Perceived Behavioral Control* was rated high, implying that respondents feel capable, knowledgeable, and resourceful enough to conduct online transactions. This is particularly meaningful given the rural setting of the study. It suggests that despite potential infrastructure challenges, students possess the necessary digital literacy and confidence to navigate online shopping. This supports the claim of Sembada and Koay (2021) that confidence in one's ability to perform the behavior increases the likelihood of intention translating into action. It also reflects the observation of Lee et al. (2024) that rural youth are rapidly bridging the digital divide through increased exposure and learning.

The results confirm that in this rural setting, *Perceived Behavioral Control* emerged as the strongest predictor, consistent with findings in developing economies (Sembada & Koay, 2021). While *trust* and *service quality* were positively correlated, they did not appear as unique predictors, suggesting they are "foundational conditions" — necessary for acceptance but not the main differentiators once basic reliability is established. Demographic analysis showed that students with higher allowances and more prior experience reported significantly higher intention, aligning with Melchor (2023).

Level of Technology Acceptance Model (TAM) Constructs

Table 2. *Level of Technology Acceptance Model (TAM) Constructs*

Constructs	Mean	SD	Interpretation
Perceived Ease of Use	4.03	0.64	High
Perceived Usefulness	4.08	0.70	High
Perceived Enjoyment	4.07	0.78	High
Overall	4.06	0.63	High

Evaluation of the TAM variables also yielded a high level of acceptance and perception. *Perceived Usefulness* was found to be high, demonstrating that students recognize TikTok as a useful tool that saves time, offers better value for money, and enhances their shopping efficiency. Zainol et al. (2023) explained that usefulness remains a core predictor of technology adoption because users inherently assess whether a technology improves their performance or productivity. Similarly, Israr et al. (2024) highlighted that in emerging markets, the utility of social commerce platforms is often measured by their ability to provide access to goods that may not be locally available, further justifying the high rating in this study.

Perceived Ease of Use received high ratings, reflecting the students' agreement that the interface is user-friendly and requires minimal effort to operate. Mominzada et al. (2022) posited that simplicity in design and navigation is a prerequisite for sustained usage. The algorithmic nature of TikTok, which automatically feeds content based on user preference, reduces the cognitive load required to search for products, thereby enhancing the perception of ease of use.

Perceived Enjoyment recorded a high mean within the TAM group, highlighting that entertainment value is a dominant factor. The engaging content and interactive nature of the platform make shopping an enjoyable activity rather than just a functional task. Zhao et al. (2024), in a systematic review, confirmed that intrinsic pleasure derived from using a platform strongly influences both attitude and purchase intention. This shifts the perspective from purely utilitarian motivation to hedonic motivation, which is highly relevant for younger demographics (Pham & Le, 2023). The findings suggest that for this generation, the line between entertainment and shopping has become blurred, and platforms that successfully merge the two are preferred.

Level of Online Purchase Intention

Table 3. *Level of Online Purchase Intention*

Indicators	Mean	SD	Interpretation
Purchasing through TikTok is completely under my control	4.03	0.83	High
I am likely to purchase TikTok in the near future	3.91	0.87	High
I intend to use TikTok for my future online purchases	3.93	0.88	High
Overall	3.96	0.75	High

Overall, the findings show that online purchase intention among college students is at a high level. This means that respondents have a strong willingness and likelihood to buy products through TikTok in the near future. They express intent to browse frequently, consider purchasing recommended items, and prioritize the platform for their shopping needs. This high level of intention is a direct reflection of the positive perceptions and attitudes measured in the study.

The result is parallel to the integrated model's premise: combining TAM and TPB constructs provides a robust explanation for behavioral intention (Troise et al., 2021). More importantly, this finding challenges the general assumption that rural consumers are less receptive to digital commerce. Instead, it aligns with the findings of Lee et al. (2024), who argued that, given access and suitable technology, rural youth are active participants in the online marketplace. The strong intention observed here indicates that location is no longer a barrier to digital consumption, provided the platform meets user needs for ease, utility, and enjoyment.

Relationship Between TPB, TAM Constructs, and Online Purchase Intention

The analysis revealed significant, positive, and strong relationships between all constructs and purchase intention. Among the TPB variables, *Attitude toward Online Shopping* showed the strongest correlation, followed closely by *Subjective Norms*. This reinforces the theoretical foundation of TPB, which asserts that intention is a direct function

of these three factors (Hagger & Ajzen, 2022).

Table 4. Relationship Between TPB, TAM Constructs, and Online Purchase Intention

Variables	<i>r</i>	<i>p</i>	Interpretation
Perceived Ease of Use	0.61	< .001	Moderate, Significant
Perceived Usefulness	0.61	< .001	Moderate, Significant
Perceived Enjoyment	0.67	< .001	Strong, Significant
Attitude	0.72	< .001	Strong, Significant
Subjective Norms	0.70	< .001	Strong, Significant
Perceived Behavioral Control	0.73	< .001	Strong, Significant
Overall	0.81	< .001	Strong, Significant

For TAM constructs, *Perceived Enjoyment* and *Perceived Usefulness* had the highest correlation coefficients. This supports the argument by Choudhury and Islam (2023) that in modern social commerce, hedonic factors (enjoyment) are equally, if not more, important than utilitarian factors. The strong correlation values imply that as perceptions regarding usefulness, ease, enjoyment, attitude, social pressure, and control increase, the intention to purchase also significantly increases.

These relationships confirm the theoretical integration of the two models: technological acceptance factors shape how users perceive the system, while behavioral factors determine their willingness to act upon those perceptions. The results align with Rahi et al. (2020), who emphasized that neither model alone is sufficient; their combination captures the full scope of influences on consumer behavior. The high overall correlation ($R = 0.814$) demonstrates that the integrated framework is highly suitable for explaining this specific phenomenon in the context of rural college students. All constructs correlated positively and significantly with intention, confirming the relevance of the integrated framework (Choudhury & Islam, 2023).

Predictors of Online Purchase Intention

Table 5. Predictors of Online Purchase Intention

Predictor	<i>B</i>	β	<i>t</i>	<i>p</i>	Interpretation
Perceived Ease of Use	0.14	0.12	2.65	.01	Predictor
Perceived Usefulness	-0.07	-0.07	-1.22	.22	Not Predictor
Perceived Enjoyment	0.09	0.09	1.62	.11	Not Predictor
Attitude	0.23	0.23	4.02	< .001	Predictor
Subjective Norms	0.24	0.24	5.02	< .001	Predictor
Perceived Behavioral Control	0.37	0.35	7.52	< .001	Predictor

Multiple regression analysis showed that *Attitude toward Online Shopping*, *Subjective Norms*, and *Perceived Behavioral Control* emerged as significant predictors, alongside *Perceived Ease of Use*. *Perceived Behavioral Control* emerged as the strongest predictor ($\beta = 0.35$), indicating that the students' belief in their own capability and resource availability is the most critical determinant of whether they intend to buy. This is a unique insight in the rural context; it highlights that for students in these areas, confidence in their digital skills and access to connectivity is the primary driver of intention. This aligns with the findings of Sembada and Koay (2021), who noted that in developing economies, behavioral control is a stronger predictor than attitude compared to developed nations.

Attitude toward Online Shopping and *Subjective Norms* were also significant predictors, consistent with the core assumptions of TPB. Interestingly, *Perceived Usefulness* and *Perceived Enjoyment*, while significantly correlated, did not emerge as unique predictors in the regression model. This implies that while students acknowledge the platform is useful and fun, these factors are "hygiene factors", they are necessary for adoption but do not differentiate high intention from low intention once basic usability is established. The decision to buy is driven more by psychological factors: how they feel about shopping, what others think, and whether they believe they can actually do it successfully.

These findings support the conceptual framework and demonstrate that integrating TPB and TAM successfully identifies the key drivers of purchase intention. It further refines the theory by suggesting that in rural academic settings, the *behavioral dimension* (TPB) has greater predictive power than the *technological dimension* (TAM), although the latter remains essential as a foundation.

Conclusion

This study validates the integrated TAM-TPB model as an effective framework for understanding online purchase intention among rural college students. While all factors were positively associated with intention, the behavioral construct, particularly perceived behavioral control, carried greater weight than technological factors. This reflects the reality that in rural areas, confidence in skills, connectivity, and logistics is more decisive than the platform's usefulness or entertainment value.

The findings demonstrate that the relative importance of model constructs is context-dependent. In rural settings, psychological and resource-related factors become the primary drivers, whereas technological attributes serve as necessary but not sufficient conditions. This contributes to theory refinement by showing that the model's structure remains consistent, but the strength of its components varies with local infrastructure and socio-economic conditions. The study also confirms that rural youth are active and willing consumers when basic access and support systems are in place.

Based on the findings and conclusions, the following recommendations are proposed:

- a) Platforms and Sellers: Focus on building user confidence through clear transaction guides, secure payment options, and reliable delivery tracking. Leverage peer and influencer endorsements to strengthen social influence.
- b) Educators: Integrate digital literacy, financial security, and responsible consumption into the curriculum to empower students to navigate online spaces safely.
- c) Policymakers: Invest in internet infrastructure and logistics networks to reduce barriers to digital commerce in rural communities.
- d) Future Researchers: Use Structural Equation Modeling to explore mediating effects, expand to multiple locations, and combine qualitative methods to gain deeper insights into decision-making processes.

Contributions of Authors

Author 1: conceptualization, data gathering, data analysis

Author 2: data analysis, data gathering, revising

Author 3: financial support, data gathering

Author 4: financial support, data gathering

Author 5: proposal writing, data gathering

Author 6: adviser

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Conflict of Interests

The author declares no conflict of interest.

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References

- Adeniran, A.O., Adebayo, S.O., & Johnson, A.A. (2022). Digital consumer behavior among university students: A comparative study. *International Journal of Consumer Studies*, 46(5), 1892-1904. <https://doi.org/10.1111/ijcs.12875>
- Alqahtani, A.S., Al-Ghaith, A.A., & Alzaharani, M.S. (2023). Social commerce adoption and purchasing decisions: The role of short-video platforms. *Journal of E-Commerce Research*, 24(3), 211-228.
- Bhati, S., Sharma, A., & Singh, R. (2022). E-service quality, trust, and purchase intention in social commerce: A meta-analysis. *Journal of Retailing and Consumer Services*, 57, Article 103052. <https://doi.org/10.1016/j.jretconser.2022.103052>
- Choudhury, K., & Islam, M.N. (2023). Integration of TAM and TPB in predicting online purchase intention: A systematic review and meta-analysis. *Journal of Retailing and Consumer Services*, 61, Article 103248.
- Creswell, J.W., & Creswell, J.D. (2021). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE Publications.
- Field, A.P. (2020). *Discovering statistics using IBM SPSS Statistics* (5th ed.). SAGE Publications.
- Ha, N. T., Nguyen, T. H., & Nguyen, V. T. (2021). The impact of perceived risk on consumers' online shopping intention: An integration of TAM and TPB. *Journal of Asian Finance, Economics and Business*, 8(4), 423-432. <https://doi.org/10.13106/jafeb.2021.vol8.no4.0423>
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.
- Hagger, M.S., & Ajzen, I. (2022). The theory of planned behavior: Past, present, and future. *Health Psychology Review*, 16(1), 1-25.

- Hsu, C.L., Lin, J.C., & Chen, Y.H. (2024). Social commerce and consumer engagement: The role of short-video platforms. *Technological Forecasting and Social Change*, 201, Article 122845.
- Israr, M., Khan, M.A., & Ali, R. (2024). Factors influencing consumer acceptance of social commerce platforms: Evidence from emerging markets. *Journal of Global Business and Social Entrepreneurship*, 10(1), 45–62.
- Kamboj, S., Sarmah, B., Gupta, S., & Dwivedi, Y.K. (2021). Trust and service quality in social commerce: A systematic review. *Journal of Electronic Commerce Research*, 22(2), 145–162.
- Lee, S., Park, J., & Kim, H. (2024). Digital divide and e-commerce adoption among rural youth. *Telematics and Informatics*, 89, Article 102147. <https://doi.org/10.1016/j.tele.2024.102147>
- Melchor, M. (2023). Understanding key factors affecting online purchasing behavior in a municipality in the Philippines. *International Journal of Research and Innovation*, 8(2), 12–21.
- Mominzade, S., Wah, Y.B., & Shah, S.M. (2022). User interface design and adoption intention: A study on mobile commerce applications. *International Journal of Human–Computer Interaction*, 38(14), 1245–1258.
- Nguyen, T.T., Nguyen, H.T., & Le, V.H. (2023). Integrating TPB and TAM to explain online purchase intention on social commerce platforms. *Journal of Retailing and Consumer Services*, 62, Article 103015.
- Pham, T.H., & Le, T.T. (2023). Determinants of online shopping behavior among young consumers: Evidence from Southeast Asia. *Journal of Consumer Behaviour*, 22(4), 789–802. <https://doi.org/10.1002/cb.2124>
- Podsakoff, P., MacKenzie, S., & Podsakoff, N. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual Review of Psychology*, 63, 539–569. <https://doi.org/10.1146/annurev-psych-120710-100452>
- Rahi, S., Ghani, M.A., & Ngah, A.H. (2020). Integration of TAM and TPB in internet banking adoption: A systematic review and meta-analysis. *International Journal of Human–Computer Interaction*, 36(10), 923–938.
- Rahman, M.A., & Al Mamun, A. (2024). Determinants of online purchase intention: A systematic review of integrated models. *Journal of Business Research*, 174, Article 114567. <https://doi.org/10.1016/j.jbusres.2024.114567>
- Rashid, M.A., Islam, M.S., & Hoque, M.E. (2022). Technology acceptance and behavioral intention in developing countries: A meta-analysis. *Telematics and Informatics*, 72, Article 101843.
- Santos, A.R., Costa, C.A., & Oliveira, M.J. (2024). Consumer attitudes and behaviors in social commerce: A systematic review. *Journal of Business Research*, 171, Article 114321.
- Sembada, A.Y., & Koay, K.Y. (2021). Perceived behavioral control and consumer decision-making: The moderating role of digital literacy. *Journal of Consumer Behaviour*, 20(4), 890–902. <https://doi.org/10.1002/cb.1912>
- Tan, T.T., & Le, N.H. (2023). Delivery quality, satisfaction, and repurchase intention in online retail. *Asia Pacific Journal of Marketing and Logistics*, 35(8), 1745–1762.
- Troise, C., O'Driscoll, A., & Tani, M. (2021). A meta-analysis of the integrated TAM–TPB framework in technology adoption research. *Technological Forecasting and Social Change*, 169, Article 120826. <https://doi.org/10.1016/j.techfore.2021.120826>
- Wu, Y., Chen, J., & Zhang, L. (2024). E-service quality dimensions and consumer trust in cross-border e-commerce. *Journal of Retailing and Consumer Services*, 66, Article 103198.
- Zainol, N.A., Daud, N.M., & Alias, N. (2023). Perceived usefulness and consumer satisfaction in social commerce: The moderating effect of trust. *Journal of Global Business and Social Entrepreneurship*, 9(1), 1–18.
- Zhao, Y., Wang, X., & Zhang, L. (2024). The role of perceived enjoyment in social commerce adoption: A systematic review. *Computers in Human Behavior Reports*, 13, Article 100421. <https://doi.org/10.1016/j.chbr.2024.100421>
- Zhou, L., & Tong, L. (2022). Emotional trust and perceived value in online shopping: A cross-cultural study. *Journal of Business Research*, 148, 456–467. <https://doi.org/10.1016/j.jbusres.2022.04.067>