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Factors influencing the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade

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Abstract

This study aims to identify and analyze the factors influencing the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade. A mixed-methods approach was employed, combining qualitative and quantitative research methods. Qualitative data were gathered through in-depth interviews and focus group discussions, while quantitative data were collected via a structured questionnaire distributed to 212 students with prior experience in online cosmetics shopping. Data analysis was conducted using SPSS 20.0, involving descriptive statistics, Cronbach's Alpha for reliability testing, exploratory factor analysis (EFA), and correlation-regression analysis. The research identified perceived usefulness, website/app design quality, and return policies as positive influencers of online cosmetics purchasing behavior, while perceived risk negatively impacted it. No significant difference was found between gender and purchasing behavior. The study concludes that students' online cosmetics purchasing behavior is significantly influenced by perceived benefits and risks, as well as the quality of the shopping platform and policies. These findings provide valuable insights for businesses to optimize their strategies in attracting and retaining student customers. Businesses in the cosmetics industry can leverage these findings to enhance their online platforms, improve customer trust through transparent policies, and tailor marketing strategies to meet the specific needs and preferences of student consumers.

Keywords: Cronbach's Alpha, data analysis, EFA, online cosmetics, purchasing behavior, qualitative research, SPSS, students, quantitative research.

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Authors' Contributions: Nguyen Van Kha conceived the study, designed the methodology, and conducted the data analysis. Bui Pham Loan Anh contributed to data collection and interpretation of results. Both authors contributed to writing and revising the manuscript. **Transparency:** The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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1. Introduction

In the current context, the Fourth Industrial Revolution is driving digitization and the application of technology across all sectors. Coupled with the rapid development of information technology and the Internet, this has sparked a revolution in the field of e-commerce, particularly in the cosmetics industry. Students, having grown up in the digital age, possess the ability to quickly adopt and adapt to new trends. Their purchasing behavior is influenced by a variety of factors, including psychological, social, and technological aspects, necessitating deeper research into these elements. The study aims to address the issues and factors affecting students' purchasing behavior. This study not only enhances the understanding of students' shopping behavior but also provides valuable insights for cosmetics businesses to develop appropriate marketing strategies, thereby improving business efficiency and better meeting the needs of young customers in today's fiercely competitive market.

The overall objective of this research is to identify the factors influencing the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade. Specifically, the study seeks to systematize the theoretical foundation of these factors, analyze them, and propose managerial implications to enhance the shopping experience and effectively and sustainably increase purchase rates. Based on factors identified in theories of purchasing behavior, the study will test hypotheses related to perceived usefulness, perceived risk, website/app design quality, return policies, and attitudes.

This research provides cosmetics businesses, especially brands targeting students, with valuable information about the needs, preferences, and consumption habits of this demographic. Such insights will assist businesses in crafting marketing strategies and developing products tailored to students' tastes. By improving product/service quality and the online shopping experience, businesses can not only boost purchasing behavior among student customers but also establish a strong competitive advantage in the cosmetics market. However, this study does more than offer deep insights into students' purchasing behavior it also opens new research directions for similar fields in the future, contributing to the enhancement of business and marketing strategies in the online cosmetics industry and paving the way for further exploration in this domain.

2. Theoretical Foundation and Development

2.1. Theoretical Foundation

The Theory of Reasoned Action (TRA), developed by Fishbein and Ajzen [1], is one of the most widely used theories to explain behavioral intentions based on an individual's attitude toward a behavior [1]. It emphasizes that human behavior is determined by behavioral intentions, which are influenced by attitudes and subjective norms. In the context of online shopping, a positive attitude toward online purchasing can lead to an intention to shop and, ultimately, actual purchasing behavior [2, 3].

The Technology Acceptance Model (TAM), proposed by Davis, posits that the acceptance of an information system is determined by two key factors: perceived usefulness and perceived ease of use. In this study, the perceived usefulness of online shopping may encourage students to purchase cosmetics online, while perceived ease of use could increase their likelihood of engaging in this activity [4].

The Theory of Planned Behavior (TPB) is an extension of the TRA [3]. The TPB model is applied to study the relationships between beliefs, attitudes, behavioral intentions, and behavior. In this context, customers' trust in online sellers forms the basis for online shopping activities to occur.

This theoretical foundation not only enhances the understanding of students' online cosmetics purchasing behavior but also provides a basis for developing research hypotheses and analytical models in this study. The application of these theories and models will help clarify the influencing factors and propose effective managerial solutions for businesses in the online cosmetics sector.

2.2. Overview of Studies Related to Online Purchasing Behavior

A study by Khan and Chavan [5] identified factors such as perceived behavioral control, perceived risk, attitude, innovativeness, and subjective norms as influencing online purchasing behavior. These five factors are considered critical information for e-commerce and marketing fields [5].

Another study highlighted that trust, perceived risk, shopping enjoyment, and website design quality impact the intention to purchase cosmetics online [6-10]. Trust, shopping enjoyment, and website design quality were found to have positive effects, while perceived risk showed no significant impact.

This research developed and tested a model to analyze factors influencing students' online cosmetics purchasing behavior. Factors such as perceived usefulness, perceived risk, website/app design quality, return policies, and attitudes were examined to gain deeper insights into students' purchasing behavior.

This overview demonstrates that online purchasing behavior is a rich research field, influenced by factors ranging from consumer psychology to external elements like website design and business policies. Previous studies have provided a solid theoretical foundation for understanding and improving online purchasing behavior within the student community.

2.3. Factors Influencing Online Cosmetics Purchasing Behavior

The study identified several key factors that significantly influence students' online cosmetics purchasing behavior. Perceived usefulness plays a crucial role, as students are more inclined to shop online when they recognize clear benefits, such as saving time and effort [11]. However, perceived risk can deter purchasing decisions, particularly concerns related to financial loss, product quality discrepancies, and personal data security [12]. Trust in online sellers and product quality also emerges as a critical factor, fostering confidence and encouraging repeat purchases [13]. Additionally, shopping enjoyment stemming from a seamless and engaging online experience enhances the likelihood of transactions, as students prefer

platforms that offer convenience and satisfaction [14]. Finally, website/app design quality significantly impacts purchasing behavior, with intuitive navigation, fast loading speeds, and clear product presentations contributing to a positive user experience [15, 16]. Together, these factors shape students' online shopping habits, highlighting the interplay between functionality, security, and user experience in e-commerce.

2.4. Research Hypotheses

2.4.1. Hypothesis on Perceived Usefulness

 H_1 : Perceived usefulness positively influences the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade.

This hypothesis posits that if students perceive online shopping as offering clear benefits such as saving time and effort, enabling shopping anytime [6] providing easy access to product information, online ordering, and home delivery [7-9] or facilitating discovery of suitable products and a variety of goods [10], they are more likely to engage in transactions.

2.4.2. Hypothesis on Perceived Risk

 H_2 : Perceived risk negatively influences the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade.

This hypothesis emphasizes that if students perceive significant risks in online shopping, such as supplier risks, technological risks, consumer risks, or product risks [17], or if studies based on TPB and TAM show that perceived risk negatively affects attitudes toward online shopping, they are likely to reduce their purchasing behavior.

2.4.3. Hypothesis on Website Design Quality

H₃: Website/app design quality positively influences the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade.

This hypothesis suggests that website design is a critical factor in success, serving as the primary link between businesses and buyers [15]. An attractive, useful, and easy-to-navigate website creates a positive shopping experience, encouraging students to make purchases [18].

2.4.4. Hypothesis on Return Policies

 H_4 : Return policies positively influence the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade.

This hypothesis aims to reinforce buyers' trust and attitudes toward products [19].

2.4.5. Hypothesis on Attitude

H₅. Attitude positively influences the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade.

This hypothesis posits that attitudes toward online shopping are shaped by positive and negative factors. Negative factors primarily relate to risks in online shopping, while positive factors involve customer policies and e-commerce website infrastructure [20]. Thus, if students hold a positive view of online shopping, they are more likely to engage in transactions.

3. Research Design

3.1 Research Process

The research process is conducted as follows:

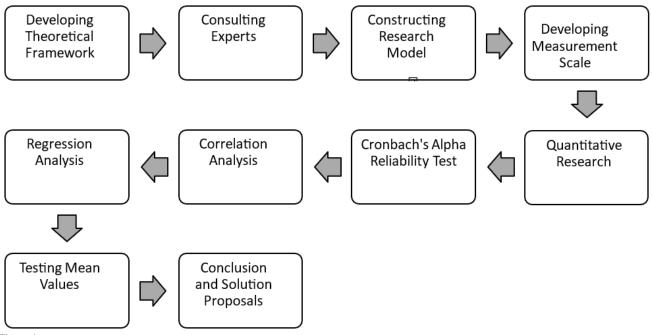


Figure 1. Research Process Diagram.

3.2. Research Methods

This study adopts a mixed-methods approach, combining qualitative and quantitative research methodologies to comprehensively examine the factors influencing students' online cosmetics purchasing behavior.

The qualitative research phase employs in-depth interviews and focus group discussions to explore students' decision-making processes in online cosmetics purchases. These methods provide rich, detailed insights into the underlying motivations, perceptions, and challenges students face when shopping for cosmetics online.

For the quantitative research, structured questionnaires are distributed to a larger sample of students to collect measurable data. This phase aims to statistically test the research hypotheses and analyze the relationships between key factors (e.g., perceived usefulness, website design quality) and purchasing behavior. The quantitative approach enables generalization of findings across the student population.

3.3. Research Site and Data Collection

The study focuses exclusively on students enrolled at Ho Chi Minh City University of Industry and Trade who have prior experience purchasing cosmetics online. Primary data is collected through surveys administered during October and November 2024, ensuring contemporaneous insights into current purchasing trends.

This targeted approach ensures the research captures relevant behavioral patterns while maintaining focus on the university's student demographic. The temporal scope (October–November 2024) aligns with academic schedules to maximize participant availability and engagement.

3.4. Measurement

3.4.1. Scale Development

For the online cosmetics purchasing behavior, the author adapted the measurement scale and research model, consisting of 5 components and 20 variables: (1) Perceived Usefulness: 4 variables; (2) Perceived Risk: 4 variables; (3) Website/App Design Quality: 4 variables; (4) Return Policies: 4 variables; (5) Attitude: 4 variables.

Each observed variable is measured using a 5-point Likert scale, ranging from "Strongly Disagree" to "Strongly Agree." Additionally, nominal and ordinal scales are used to screen respondents and collect personal information such as age, gender, occupation, and income.

- Perceived Usefulness (HI) Scale: Includes 4 variables, coded from HI1 to HI4 as follows:
 - HI1: You feel that online shopping saves more time compared to offline shopping.
 - HI2: You believe that online shopping offers more product choices.
 - HI3: You think that online shopping makes it easier to compare prices.
 - HI4: You feel that online shopping provides more comprehensive product information.
- Perceived Risk (RR) Scale: Includes 4 variables, coded from RR1 to RR4 as follows:
 - RR1: You worry about not receiving products as described when shopping online.
 - RR2: You feel unsafe providing personal information on shopping websites.
 - RR3: You are concerned about difficulties in returning products after purchase.
 - RR4: You fear that the products you buy may be defective or of poor quality.
- Website/App Design Quality (TK) Scale: Includes 4 variables, coded from TK1 to TK4 as follows:

- TK1: You find the website/app interface easy to use.
- TK2: You have difficulty finding products on the website/app.
- TK3: The website/app loading speed affects your shopping experience.
- TK4: Product information is presented clearly and understandably.
- Return Policies (DT) Scale: Includes 4 variables, coded from DT1 to DT4 as follows:
 - DT1: You find it easy to follow the product return process.
 - DT2: Return policies influence your purchasing decisions.
 - DT3: You are well aware of the return policies of the website/app you shop on.
 - DT4: You feel that the website/app's return policies are fair and reasonable.
- Attitude (TD) Scale: Includes 4 variables, coded from TD1 to TD4 as follows:
 - TD1: You feel satisfied with your online shopping experience.
 - TD2: You frequently recommend online shopping to friends and family.
 - TD3: You will continue shopping online in the future.
 - TD4: You feel more positive about online shopping compared to traditional shopping.
- Online Cosmetics Purchasing Behavior (HV) Scale: Includes 4 variables, coded from HV1 to HV4 as follows:
 - HV1: You frequently purchase cosmetics online.
 - HV2: You enjoy shopping for cosmetics online.
 - HV3: You search for information before deciding to buy cosmetics online.
 - HV4: You regularly follow promotional programs on cosmetics websites.

3.4.2. Measurement Methods

- Likert Scale: Used to assess students' level of agreement with observed variables. This scale helps determine the influence of each factor on online cosmetics purchasing behavior.
- Nominal Scale: Used to collect respondents' personal information, facilitating data analysis across different groups.
- Ordinal Scale: Applied to rank factors based on priority or perceived importance in students' perceptions.

3.5. Data Collection Methods

3.5.1 Qualitative Data

Before collecting data, the author conducted preliminary research to gain a deeper understanding of the factors influencing online cosmetics purchasing behavior. Qualitative data collection methods included in-depth interviews and focus group discussions.

- In-Depth Interviews: The author interviewed students with experience in online cosmetics shopping and online sales consultants. The goal was to gather detailed insights into the factors affecting purchasing behavior, clarifying key aspects for the study.
- Focus Group Discussions: Group discussions were organized to collect opinions and perspectives from various students, providing a comprehensive view of online cosmetics purchasing behavior.

3.5.2. Quantitative Data

Following the preliminary interviews, the author developed a survey questionnaire to collect quantitative data. This questionnaire was distributed to students at Ho Chi Minh City University of Industry and Trade to gather official data on their online cosmetics purchasing behavior. Surveyed factors included perceived usefulness, perceived risk, website/app design quality, return policies, and attitude.

3.6. Data Analysis Methods

3.6.1. Cronbach's Alpha Reliability Analysis

This method is used to test the reliability of the measurement scales. Observed variables are analyzed to determine internal consistency. The Cronbach's Alpha coefficient is interpreted as follows:

- 0.8 to nearly 1: Excellent scale reliability.
- 0.7 to nearly 0.8: Good scale reliability.
- 0.6 and above: Acceptable scale reliability.

3.6.2. Exploratory Factor Analysis (EFA)

EFA is conducted to reduce a large set of observed variables into a smaller, more meaningful set of factors [21]. This method groups observed variables into key factors, identifying those with the greatest influence on students' online cosmetics purchasing behavior.

3.6.3. Correlation Coefficient Analysis

This analysis determines the relationships between influencing factors and purchasing behavior. According to Field [22], while the Pearson correlation coefficient can assess linear relationships between two variables, a statistical significance test is needed to confirm its validity [23]. If the significance value (sig) is less than 0.05, the pair of variables has a linear

correlation; if sig is greater than 0.05, no linear correlation exists (assuming a 5% significance level = 0.05). Once a linear correlation is confirmed, the strength of the relationship is evaluated based on the absolute value of r:

- |r| < 0.1: Very weak correlation.
- |r| < 0.3: Weak correlation.
- |r| < 0.5: Moderate correlation.
- $|r| \ge 0.5$: Strong correlation.

Using correlation coefficients, the study can highlight the degree of association between variables, enhancing understanding of the factors impacting purchasing behavior.

3.6.4. Linear Regression Analysis

Regression analysis is used to test hypotheses and assess the degree of influence of one or more independent variables (explanatory variables) on a dependent variable (outcome variable), enabling predictions of the outcome based on known values of the explanatory variables. This method allows for a detailed evaluation of each factor's impact, leading to conclusions about the primary factors influencing online cosmetics purchasing behavior.

4. Research Results

4.1. Sample Description

Table 1. Statistics of Students by Academic Year.

Category	Quantity	Percentage (%)
Valid		
Other	2	1.0
Year 1	14	7.0
Year 2	36	18.0
Year 3	38	19.0
Year 4	110	55.0
Total	200	100.0

From the results above, it can be observed that out of 200 respondents, the majority are Year 4 students, with 110 individuals accounting for 55.0%, the highest proportion. Year 3 students numbered 38, representing 19.0%, followed by Year 2 students with 36 individuals (18.0%). Year 1 students had the lowest representation at 7.0% (14 students), while "Other" students accounted for 2 individuals (1.0%). This suggests that most students who have purchased cosmetics online are predominantly from Year 4.

Table 2. Gender Statistics.

Category	Quantity	Percentage (%)
Valid		
Female	130	65.0
Male	70	35.0
Total	200	100.0

Of the 200 student respondents, 70 were male, accounting for 35.0% of the total responses, while 130 were female, making up 65.0%. The results indicate that female respondents outnumbered male respondents by 40 individuals, though the difference is not overly significant.

Table 3. Income Statistics.

Category	Quantity	Percentage (%)
Valid		
< 2 million VND	86	43.0
2 - 4 million VND	52	26.0
4 - 5 million VND	32	16.0
> 5 million VND	30	15.0
Total	200	100.0

Regarding income, among the 200 surveyed students, 86 had an income below 2 million VND, representing 43.0%, the highest proportion in this survey. Students with incomes between 2–4 million VND numbered 52 (26.0%), followed by those earning 4–5 million VND with 32 students (16.0%). Finally, students with incomes above 5 million VND totaled 30,

equivalent to 15.0%, the lowest proportion. Overall, it can be inferred that students who have shopped for cosmetics online generally have relatively stable incomes.

4.2. Descriptive Statistics of Research Variables

Table 4. Descriptive Statistics of Research Variables.

Variable	N	Minimum	Maximum	Mean	Std. Deviation
HI1	200	1	5	3.87	1.050
HI2	200	1	5	3.69	1.096
HI3	200	2	5	3.72	1.063
HI4	200	2	5	3.69	1.059
RR1	200	1	5	3.69	1.073
RR2	200	1	5	3.66	1.132
RR3	200	1	5	3.50	1.228
RR4	200	1	5	3.43	1.254
TK1	200	1	5	3.70	1.134
TK2	200	1	5	3.81	1.145
TK3	200	1	5	3.73	1.088
TK4	200	1	5	3.73	1.055
DT1	200	1	5	3.72	1.237
DT2	200	1	5	3.66	1.300
DT3	200	1	5	3.93	0.856
DT4	200	1	5	3.65	1.206
TD1	200	1	5	3.69	1.123
TD2	200	1	5	3.68	1.115
TD3	200	1	5	3.62	1.123
TD4	200	1	5	4.25	0.885
HV1	200	1	5	3.56	1.189
HV2	200	2	5	3.89	1.067
HV3	200	2	5	3.76	1.049
HV4	200	2	5	3.74	1.100
Valid N (listwise)	200				

Based on the descriptive statistics summarized in the table, the survey questions were evaluated on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This indicates that the factors influencing online cosmetics purchasing behavior vary widely. The mean values range from 3.4 to 4.3, suggesting that most respondents generally leaned toward agreement. Variables with the highest mean values in each scale include TD4 (4.25), DT3 (3.93), HV2 (3.89), and HI1 (3.87). Variables with the lowest mean values include RR4 (3.43), RR3 (3.50), HV1 (3.56), and TD3 (3.62).

The standard deviation of all observed variables ranges from 0.856 to 1.300, with most values greater than 1 but less than the mean, indicating low variability. This suggests that student responses for these variables show little difference, with data dispersion around the mean being relatively low.

4.3. Cronbach's Alpha Reliability Analysis

Table 5. Summary of Cronbach's Alpha Reliability Test Results for Each Variable Group.

Initial Variables Variables Excluded **Factor** Remaining Cronbach's No. Variables Alpha Perceived Usefulness 4 0.789 4 None Perceived Risk 4 4 0.725 None 4 Website/App Design Quality 4 0.771 None 4 4 **Return Policies** 4 0.792 None 5 4 Attitude 4 0.673 None Online Cosmetics Purchasing Behavior 4 0.643 4 None

4.4. Exploratory Factor Analysis (EFA)**

Table 6.

Factors After EFA Analysis.

No.	Factor	Code	Observed Variables	Type
1	Perceived Usefulness	HI	HI1, HI2, HI3, HI4 (4 variables)	Independent
2	Perceived Risk	RR	RR1, RR2, RR3, RR4 (4 variables)	Independent
3	Website/App Design Quality	TK	TK1, TK2, TK3, TK4 (4 variables)	Independent
4	Return Policies	DT	DT1, DT2, DT4 (3 variables)	Independent
5	Attitude	TD	TD1, TD2, TD3 (3 variables)	Independent
6	Online Cosmetics Purchasing Behavior	HV	HV1, HV2, HV3, HV4 (4 variables)	Dependent

Total Independent Variables: 18

Total Dependent Variables: 4

4.5. Pearson Correlation Analysis

Before conducting regression analysis, the author performed a Pearson correlation analysis to examine the linear relationships between independent variables and the dependent variable, as well as among the independent variables themselves.

Table 7.

Pearson Correlation Analysis Results.

	HI	RR	TK	DT	TD	HV
HI	Pearson Correlation	1	0.183**	0.189**	0.270**	0.170*
	Sig. (2-tailed)		0.010	0.007	0.000	0.016
	N	200	200	200	200	200
RR	Pearson Correlation	0.183**	1	0.054	0.309**	0.227**
	Sig. (2-tailed)	0.010		0.450	0.000	0.001
	N	200	200	200	200	200
TK	Pearson Correlation	0.189**	0.054	1	0.308**	0.214**
	Sig. (2-tailed)	0.007	0.450		0.000	0.002
	N	200	200	200	200	200
DT	Pearson Correlation	0.270**	0.309**	0.308**	1	0.265**
	Sig. (2-tailed)	0.000	0.000	0.000		0.000
	N	200	200	200	200	200
TD	Pearson Correlation	0.170*	0.227**	0.214**	0.265**	1
	Sig. (2-tailed)	0.016	.001	0.002	0.000	
	N	200	200	200	200	200
HV	Pearson Correlation	0.155*	0.292**	0.166*	0.259**	0.161*
	Sig. (2-tailed)	0.029	0.000	0.019	0.000	0.023
	N	200	200	200	200	200

The Pearson correlation analysis (Table 7) shows that the significance values (Sig.) for the correlations between the independent variables HI, RR, TK, DT, TD, and the dependent variable HV are all less than 0.05. This indicates a linear relationship between these independent variables and HV. The strongest correlation is between RR and HV (r = 0.292), while the weakest is between HI and HV (r = 0.155). The correlations among the independent variables are relatively weak, suggesting a low likelihood of multicollinearity.

4.6. Regression Analysis

Table 8

Linear Regression Analysis Results (Round 1).

Model	R	R ²	Adjusted R ²	Std. Error of Estimate	Durbin- Watson
1	0.778a	0.605	0.594	0.27239	1.935
a. Independent variables: HI, RR, TK, DT, TD.					
b. Dependent variable: HV					

Table 9. ANOVA Analysis Results (Round 1).

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	22.010	5	4.402	59.329	0.000b
Residual	14.395	194	0.074		
Total	36.405	199			
a. Dependent variable: HV					
b. Independent variables: HI, RR, TK, DT, TD					

Table 10.

Coefficients of Observed Variables (Round 1).

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics
	В	Std. Error	Beta		
1					
(Constant)	0.647	0.226		2.858	0.005
HI	0.066	0.052	0.070	1.260	0.209
RR	0.167	0.062	0.175	2.692	0.008
TK	0.252	0.059	0.275	4.275	0.000
DT	0.075	0.055	0.090	1.359	0.176
TD	0.290	0.055	0.335	5.286	0.000

Note: a. Dependent Variable: HV.

Table 11

Linear Regression Analysis Results (Round 2).

Model	R	R ²	Adjusted R ²	Std. Error of Estimate	Durbin-Watson
1	0.707a	0.500	0.495	0.30400	1.765

Note: a. Independent variables: TD, HI

b. Dependent variable: HV.

Table 12.

ANOVA Analysis Results (Round 2)

Model	Sum of Squares	df	Mean Square	F	Sig.
1					
Regression	18.199	2	9.100	98.467	0.000b
Residual	18.206	197	0.092		
Total	36.405	199			

Note: a. Dependent variable: HV b. Independent variables: TD, HI.

Table 13.

Coefficients of Observed Variables (Round 2)

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.	Collinearity Statistics
	В	Std. Error	Beta		
1					
(Constant)	1.254	0.234		5.369	0.000
HI	0.196	0.053	0.208	3.686	0.000
TD	0.510	0.049	0.589	10.465	0.000

Note: a. Dependent Variable: HV.

From the second-round regression analysis, the author demonstrated that two factors significantly influence the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade, ranked from strongest to weakest: (1) Perceived Usefulness, (2) Attitude. Accordingly, the author established the following standardized regression equation:

HV = 0.035 HI + 0.049 TD

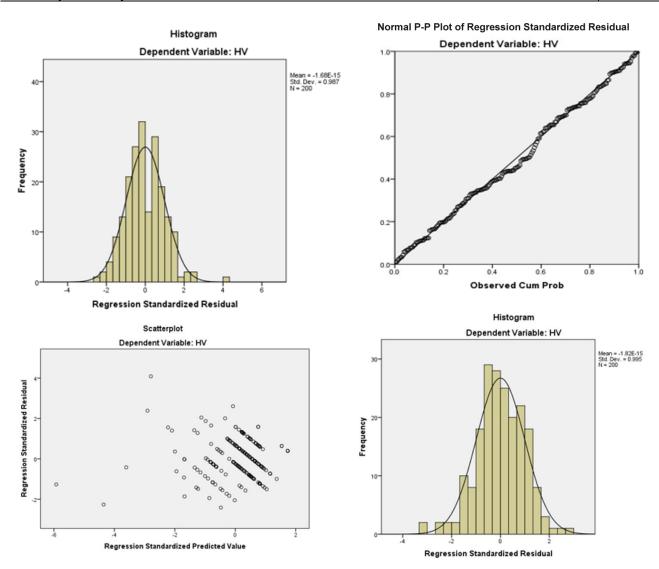
Where:

- HV: Dependent variable (Online Cosmetics Purchasing Behavior)
- Independent variables (Xi):
- HI: Perceived Usefulness
- TD: Attitude of students

4.7. Hypothesis Testing

Table 14. Hypothesis Testing Results.

Hypothesis	Result
H1: Perceived Usefulness positively influences the online cosmetics purchasing behavior of students at Ho	Accepted
Chi Minh City University of Industry and Trade.	
H2: Perceived Risk positively influences the online cosmetics purchasing behavior of students at Ho Chi Minh	Rejected
City University of Industry and Trade.	
H3: Website/App Design Quality positively influences the online cosmetics purchasing behavior of students	Rejected
at Ho Chi Minh City University of Industry and Trade.	
H4: Return Policies positively influence the online cosmetics purchasing behavior of students at Ho Chi Minh	Rejected
City University of Industry and Trade.	
H5: Attitude positively influences the online cosmetics purchasing behavior of students at Ho Chi Minh City	Accepted
University of Industry and Trade.	_



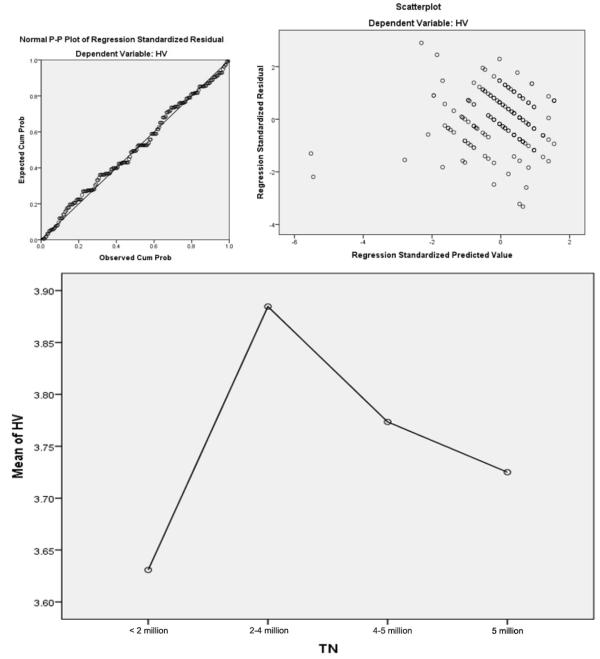


Figure 2. Dependent Variable: HV.

5. Discussion

This study has demonstrated that multiple factors influence the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade. The primary factors include personal needs, trust in brands, pricing, reviews from other consumers, the convenience of online shopping, as well as psychological and social factors such as influences from friends, family, and social media. The results indicate that students tend to prioritize easy and fast shopping experiences, aligning with modern consumption trends where time and convenience are paramount. Specifically, students are more inclined to shop online when they perceive clear benefits and when the user experience on websites or apps is favorable. Conversely, if they perceive significant risks associated with online shopping, such as receiving products that do not match descriptions or difficulties with returns, they tend to limit their purchasing behavior.

The findings of this study are consistent with previous research on online purchasing behavior. For instance, Amanah [24] found that students often purchase lower-priced items because they can easily find similar products sold by online vendors at reduced prices [24]. This is also confirmed in our study, where pricing emerged as a critical determinant of students' online purchasing behavior.

Moreover, theoretical models such as the Theory of Reasoned Action (TRA) and the Technology Acceptance Model (TAM) were applied in this study to explain purchasing behavior. Factors such as perceived usefulness, perceived risk, website/app design quality, return policies, and attitude were shown to influence purchasing decisions, further clarifying the research findings.

The factors affecting online purchasing behavior are not only significant for understanding student consumer behavior but also offer practical insights for cosmetics businesses to develop more effective marketing strategies. Recognizing that students prioritize convenience and brand trust can help managers tailor advertising and promotional strategies to attract this demographic. The study also highlights that improving the online shopping experience, from website interfaces to return policies, can significantly impact students' purchasing decisions. This underscores the importance of investing in technology and customer service within the e-commerce sector.

However, the current study has some limitations. First, the students participating in in-depth interviews were all from Ho Chi Minh City University of Industry and Trade, which may limit the generalizability of the results to other universities or regions. Cultural, economic, and social differences across localities could influence students' online purchasing behavior. Second, interviewing a small number of students may not sufficiently represent the entire student population, potentially reducing the reliability of the findings and conclusions. Third, the study was conducted within a specific timeframe and may not reflect changes in purchasing behavior over time, especially given the continuous evolution of technology and the ecommerce market. Despite these limitations, the author suggests that future researchers could build upon this study by conducting further research at Ho Chi Minh City University of Industry and Trade, as well as in other cities across Vietnam.

This study provides a comprehensive overview, emphasizing key points and proposing directions for the practical application and further development of the research. Beyond offering deep insights into students' purchasing behavior, it also opens new research avenues for related fields, enabling businesses and managers to optimize their business and marketing strategies.

6. Conclusion

The research on factors influencing the online cosmetics purchasing behavior of students at Ho Chi Minh City University of Industry and Trade reveals that students' purchasing behavior is shaped by various factors, including perceived usefulness, perceived risk, website/app design quality, return policies, and attitude. The results demonstrate that perceived usefulness, website/app design quality, and return policies positively influence purchasing behavior, while perceived risk has a negative impact. Notably, no statistically significant difference was found between gender and online cosmetics purchasing behavior, leading to the rejection of some initial hypotheses.

These findings carry significant practical implications for businesses and managers, offering insights into optimizing business and marketing strategies to attract and retain student customers shopping online. Overall, this study not only captures a broad picture of the online shopping market among students at Ho Chi Minh City University of Industry and Trade but also contributes to improving business and marketing strategies in this domain. It represents a crucial step in exploring and deepening the understanding of online consumer behavior within the student community, while also paving the way for new research directions in the future.

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