

Article

The Mediating Effect of Online Shopping Platform Attributes on Customer Satisfaction and Loyalty Among Chinese Student Online Shoppers

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Abstract: This study investigates the mediating effect of Taobao online shopping platform attributes on customer satisfaction and loyalty among Chinese student online shoppers. A quantitative, correlational research design was employed, utilizing Path Analysis with Bootstrapping for mediation analysis to examine both the direct and indirect effects of customer satisfaction on customer loyalty, with Taobao platform attributes serving as the mediating variable. Mean analysis, Spearman's rank correlations, and the Path Analysis framework with Bootstrapping were adopted for data analysis. A total of 1,690 students participated in the study. Results revealed that information quality, product delivery, and perceived security consistently emerged as the top three factors most strongly correlated with customer satisfaction. Moreover, information quality, privacy concerns, perceived security, product variety, and product delivery significantly mediated the relationship between customer satisfaction and customer loyalty in the context of online retail, with information quality identified as the strongest mediating factor.

Keywords: customer loyalty; customer satisfaction; online shopping platform; online buying experience; online shopper; online shopping attributes

1. Introduction

Taobao is an online shopping platform owned by Alibaba Group, launched in 2003, and has become one of the largest e-commerce platforms in the Asia-Pacific region, with nearly 500 million registered users and over 800 million listed products, averaging 48,000 sales per minute [1]. Its rapid growth is driven by key platform attributes that significantly influence customer satisfaction and loyalty.

Among these attributes, information quality, privacy concerns, perceived security, product variety, and product delivery are the most critical in shaping online shopping experiences. Information quality-including the accuracy, clarity, and completeness of product descriptions-directly affects consumer purchasing decisions and reduces uncertainty [2,3]. Privacy concerns play a central role, as consumers increasingly demand transparency in the collection, storage, and use of personal data; clear privacy policies and adherence to relevant laws build user trust [4-6]. Closely linked to privacy, perceived security-supported by technological safeguards such as encryption, two-factor authentication, and secure payment gateways-reduces risk perception and enhances purchase confidence [7-9].

Product variety is another decisive factor, as platforms offering diverse categories and brands gain a competitive advantage by catering to heterogeneous consumer needs, though excessive information may require mitigation through personalized recommen-

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dation systems [10-12]. Similarly, product delivery significantly influences consumer satisfaction, as fast, transparent, and flexible logistics services strengthen trust and loyalty. Leading logistics providers demonstrate how technological innovation and efficient distribution enhance the overall shopping experience [13-17].

Huanggang City, a key hub in Hubei Province, has experienced steady retail growth driven by rising consumer demand and consumption upgrading, offering both online convenience and offline service experiences [18]. College students are central to this trend, with a high proportion engaging in online shopping, favoring platforms such as Taobao/Tmall, Pinduoduo, and TikTok for affordability and product variety [19,20]. Huanggang's central location, strong logistics network, and cultural openness, combined with its three universities-public, public vocational, and private vocational-provide a diverse student base, making the city an ideal setting to examine how online shopping shapes the consumption behaviors, preferences, and lifestyles of Chinese college students.

Despite extensive research on online shopping behavior, studies focusing specifically on Chinese college students remain limited, even though the country's unique cultural background, price-sensitive consumer patterns, and distinct student consumption habits render such investigations both theoretically and practically significant [21,22].

2. Study Objectives

2.1. General Objective

The primary aim of this study is to investigate the mediating effect of Taobao online shopping platform attributes on customer satisfaction and loyalty among Chinese student online shoppers.

2.2. Specific Objectives

The study seeks to achieve the following specific objectives:

1. To describe Taobao online shopping platform attributes in terms of information quality, privacy concerns, perceived security, product variety, and product delivery.
2. To assess the level of customer satisfaction of Chinese student online shoppers towards the Taobao platform.
3. To examine the level of customer loyalty of Chinese student online shoppers towards the Taobao platform.
4. To determine whether a significant relationship exists between Taobao platform attributes and customer satisfaction among Chinese student online shoppers.
5. To determine whether a significant relationship exists between Taobao platform attributes and customer loyalty among Chinese student online shoppers.
6. To examine the relationship between customer satisfaction and customer loyalty among Chinese student online shoppers.
7. To evaluate the mediating effect of Taobao platform attributes on the relationship between customer satisfaction and customer loyalty among Chinese student online shoppers.

2.3. Research Hypotheses

Based on the objectives outlined above, the following hypotheses are proposed:

- **Ho1:** There is no significant relationship between Taobao platform attributes and customer satisfaction among Chinese student online shoppers.
- **Ho2:** There is no significant relationship between Taobao platform attributes and customer loyalty among Chinese student online shoppers.
- **Ho3:** There is no significant relationship between customer satisfaction and customer loyalty among Chinese student online shoppers.

- **Ho4:** Taobao platform attributes do not have a mediating effect on the relationship between customer satisfaction and customer loyalty among Chinese student online shoppers.

3. Framework of the Study

3.1. Theoretical Framework

The Expectation Confirmation Theory (ECT) explains how individuals' prior expectations shape their perceptions, attitudes, and behaviors toward a product or service. The theory posits that when expectations are met or exceeded, individuals develop positive attitudes, higher satisfaction, and stronger intentions to continue using the product or service, whereas unmet expectations result in dissatisfaction. Rooted in social and cognitive psychology, ECT draws on principles of social comparison and cognitive dissonance to explain how individuals process confirmation or disconfirmation of expectations. Empirical evidence supports its application in consumer behavior, customer satisfaction, and technology adoption across various contexts [1].

ECT is applied in this study to examine Taobao's online shopping platform attributes, focusing on how Chinese student shoppers form expectations regarding key platform factors and how their post-purchase experiences influence satisfaction and loyalty.

The Information Systems Success Model (ISSM) further supports the framework by proposing that system quality, information quality, and service quality are key determinants of user satisfaction and continued usage intention [2]. This model aligns with the study context, as Taobao operates as an e-commerce information system. Specifically, information quality corresponds to the Information Quality construct; privacy concerns and perceived security correspond to System/Service Quality and Trust; product variety and product delivery correspond to Service Quality/Net Benefits; and user satisfaction mediates the relationship between platform attributes and customer loyalty [2].

3.2. Conceptual Framework

The conceptual framework of the study is presented in Figure 1. Solid lines indicate direct relationships among variables, while broken lines represent mediating effects.

A questionnaire will be employed to assess respondents' perceptions of Taobao's online shopping attributes. The study will analyze the relationship between each attribute dimension and customer satisfaction. Additionally, the mediating effect of each attribute on the relationship between customer satisfaction and customer loyalty will be examined. Finally, the overall relationship between customer satisfaction and customer loyalty will be evaluated.

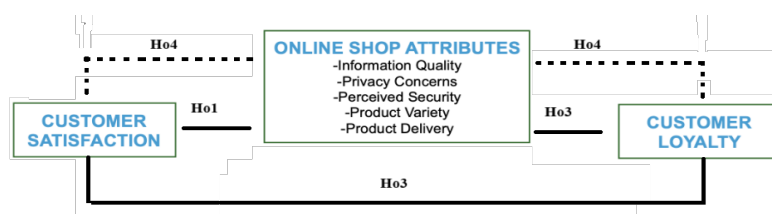


Figure 1. Conceptual framework.

4. Literature Review

4.1. Taobao Online Shopping Platform

Taobao operates as an online shopping platform with a business model that primarily includes advertising revenue, transaction commissions, and value-added services. By providing an open platform, it allows individuals and businesses to establish online stores offering a wide variety of goods and services. Taobao's success is driven by its large user base, convenient payment systems, and robust logistics support. In addition, the platform

utilizes big data and artificial intelligence technologies to provide personalized shopping recommendations, further enhancing the user experience. These features collectively contribute to Taobao's position as a leading e-commerce platform in China.

4.2. Information Quality of Online Shops

Information quality is a key determinant influencing consumer purchase decisions. Critical aspects include accuracy, completeness, timeliness, and relevance of the information provided. Accurate information enhances consumer trust and reduces post-purchase uncertainty, while comprehensive product descriptions and user reviews facilitate informed purchasing decisions and increase purchase intention. Timely updates on inventory and pricing directly impact shopping experiences and trust, whereas personalized recommendation systems improve the relevance of information and boost conversion rates. High-quality information systems are therefore essential for the success of online shopping platforms.

4.3. Privacy Concerns of Online Shops

Privacy concerns represent a major risk in online shopping, encompassing potential personal information leakage and data misuse. Platforms collect user data to offer personalized services, which can raise issues related to privacy protection. Strengthening data encryption technologies and complying with relevant laws are crucial for safeguarding consumer privacy. Simultaneously, consumers are encouraged to enhance their awareness of privacy protection and cautiously share personal information online.

4.4. Perceived Security of Online Shops

Perceived security is influenced by factors such as payment safety, protection of personal information, and platform reputation. Mobile payment technologies and secure online payment gateways have improved consumer confidence, yet online fraud and data breaches continue to undermine trust. Employing technical safeguards, such as two-factor authentication, and adhering to legal standards are necessary measures to ensure a secure shopping environment and enhance perceived security among consumers.

4.5. Product Variety of Online Shopping

Consumers tend to prefer platforms offering a wide range of products and diverse choices. The expansion of cross-border e-commerce has further increased available options. However, increased product variety can lead to information overload, potentially confusing consumers during decision-making. Intelligent recommendation systems can help mitigate this issue by guiding users to relevant products efficiently, thereby improving the shopping experience.

4.6. Product Delivery of Online Shopping

Logistics and delivery quality are crucial determinants of consumer satisfaction in online shopping. Factors such as delivery speed, cost, and service quality significantly influence the shopping experience. Advances in logistics technology, including drone delivery and intelligent warehousing, have improved efficiency, yet delays or damage during transit can still negatively affect satisfaction. Optimizing logistics networks and providing comprehensive training for delivery personnel are key strategies to enhance service quality and customer experience.

4.7. Customer Loyalty

Customer loyalty in online shopping may differ from traditional offline settings. Core determinants include customer satisfaction, trust, and brand identity. High levels of satisfaction increase the likelihood of long-term loyalty, while personalized services and membership programs further strengthen commitment to the platform.

4.8. Customer Satisfaction with Online Shops

Customer satisfaction is influenced by multiple factors and serves as a critical determinant of repeat purchases and positive word-of-mouth. Satisfied customers are more likely to become loyal users and recommend the platform to others. Furthermore, customer satisfaction is closely associated with brand image and overall market competitiveness.

4.9. Online Shopping Attributes

Key attributes of online shopping platforms include website design, product information, pricing, security, and customer service. Competitive pricing and promotional activities attract consumers and enhance loyalty. Due to the virtual nature of online shopping, security and trust are particularly important; factors such as payment protection, privacy safeguards, and after-sales support significantly influence consumer confidence. Third-party authentication and user reviews further enhance trust, while high-quality customer service strengthens satisfaction and loyalty.

4.10. Student Online Purchases

College students, who have grown up in an internet-rich environment, are particularly receptive to online shopping. They value the convenience and enjoyment of shopping without leaving home. However, the rise of mobile payment technologies has also contributed to more prominent irrational consumption behaviors among this demographic, highlighting the need for guidance in responsible online spending.

5. Research Methodology

5.1. Study Design and Locale

This study adopts a quantitative approach with a descriptive-correlational research design incorporating mediation analysis. The research aims to examine students' perceptions and attitudes toward customer satisfaction and customer loyalty, with online shopping attributes—specifically information quality, privacy concerns, perceived security, product variety, and product delivery—serving as mediating variables. The study investigates how these attributes mediate the relationship between customer satisfaction and customer loyalty in the context of online shopping. Data are collected using a structured questionnaire administered through an online survey platform, targeting students from three universities in Huanggang City, Hubei Province, China. This approach ensures systematic capture of participants' experiences, perceptions, and evaluations of online shopping platforms.

5.2. Study Participants

The study focuses on students from three universities in Huanggang: a public university, a public vocational and technical college, and a private vocational college. Huanggang, located in central Hubei Province, provides a representative and accessible research setting, allowing for efficient data collection and comparability across campuses.

5.2.1. Sample Size and Sampling Methodology

The minimum sample size was determined using a 95% confidence level and a 5% margin of error, resulting in 1,129 participants as the baseline requirement. To enhance

representativeness, a total of 1,690 students participated in the study. Participants were selected using a convenience sampling technique, ensuring practical access to respondents while covering diverse student demographics across the three institutions (As shown in Table 1).

Table 1. Summary of the total population and sample size of 3 schools.

Name of School	Population	Required Sample Size	Actual Sample Size
Huanggang Normal University (HNU)	19,414	377	565
Huanggang Vocational and Technical College (HVTC)	20,000	377	505
Huanggang Vocational College of Science and Technology (HVCST)	15,277	375	620
Total	54,691	1129	1690

5.2.2. Inclusion and Exclusion Criteria

Inclusion Criteria

The study included college students officially enrolled in the 2024-2025 academic year at the following institutions: Huanggang Normal University, Huanggang Vocational and Technical College, and Huanggang Vocational College of Science and Technology.

Exclusion Criteria

Students were excluded if they were not officially enrolled in the 2024-2025 academic year at the identified institutions, had never used the Taobao platform, declined to participate, did not provide informed consent, or submitted incomplete or invalid responses during data collection.

5.3. Research Instruments

The study utilized a structured survey instrument designed to assess Taobao online shopping platform attributes, including Information Quality, Privacy Concerns, Perceived Security, Product Variety, and Product Delivery. The instrument employed a six-point Likert scale to capture participants' responses, with options ranging from:

1. Strongly Disagree
2. Disagree
3. Moderately Disagree
4. Moderately Agree
5. Agree
6. Strongly Agree

This design enables quantification of respondents' perceptions and facilitates subsequent statistical analysis of the relationships between online shopping attributes, customer satisfaction, and customer loyalty (As shown in Table 2).

Table 2. Likert Scale Ranges and Descriptive Rating.

Scale	Range	Descriptive Rating	Interpretation
1	1.00-1.82	Strongly Disagree	Very Low
2	1.83-2.65	Disagree	Low
3	2.66-3.48	Moderately Disagree	Moderately Low
4	3.49-4.31	Moderately Agree	Moderately High

5	4.32-5.14	Agree	High
6	5.15-6.00	Strongly Agree	Very High

Reliability Test

A reliability test was conducted with a sample of 30 students to evaluate the internal consistency of the survey instrument. The results, summarized in Table 3, indicate high reliability across all measured variables:

- Information Quality ($\alpha = 0.899$)
- Privacy Concerns ($\alpha = 0.943$)
- Perceived Security ($\alpha = 0.938$)
- Product Variety ($\alpha = 0.946$)
- Product Delivery ($\alpha = 0.956$)
- Customer Satisfaction ($\alpha = 0.959$)
- Customer Loyalty ($\alpha = 0.904$)

These results demonstrate that the questionnaire possesses strong internal consistency and is appropriate for use in the main study.

Table 3. Reliability Testing Results (n= 30).

Scales	Cronbach's Alpha Values	Interpretation
Online Shop Attributes		
1. Information Quality	0.956	Good (high internal consistency)
2. Privacy Concerns	0.899	Good (high internal consistency)
3. Perceived Security	0.943	Good (high internal consistency)
4. Product Variety	0.938	Good (high internal consistency)
5. Product Delivery	0.946	Good (high internal consistency)
Customer Satisfaction	0.959	Good (high internal consistency)
Customer Loyalty	0.904	Good (high internal consistency)

5.4. Research Procedures

The researcher coordinated with faculty members from the participating universities to invite students to participate in the study. A structured questionnaire, including an informed consent form, was developed and distributed via Questionnaire Star on WeChat, providing both a clickable link and a QR code for convenient access. Prior to responding, participants were required to read and acknowledge the informed consent form, which detailed the study's purpose, potential risks, anticipated benefits, confidentiality measures, and data management procedures. The online distribution method facilitated efficient and accessible participation. The questionnaire collected students' perceptions regarding the impact of online shopping attributes-including information quality, privacy concerns, perceived security, product variety, and product delivery-on customer satisfaction and customer loyalty.

5.5. Ethical Considerations

All research procedures were reviewed and approved by the Angeles University Ethics and Review Committee, ensuring adherence to ethical standards and the principles of research integrity, including voluntary participation, informed consent, and data confidentiality.

5.6. STATISTICAL ANALYSIS OF DATA

Data analysis involved both descriptive and inferential statistical techniques. Descriptive statistics-including mean, standard deviation, frequency, and percentage distributions-were used to summarize participants' responses for each variable. Spearman's Rank Correlation, a non-parametric measure, was employed to assess the strength and

direction of associations among online shopping platform attributes, customer satisfaction, and customer loyalty. To evaluate the mediating effects of Taobao online shopping attributes on the relationship between customer satisfaction and customer loyalty, a Path Analysis framework with Bootstrapping was utilized, allowing for examination of both direct and indirect effects.

6. Discussion

6.1. Online Shop Attributes

Students from all three schools generally found online shopping acceptable but indicated that there is room for improvement. Most students only agreed to a limited extent, suggesting that while the platform functions adequately, it is not flawless. School 1 students gave the highest ratings, particularly for product details and delivery, although individual opinions varied widely. School 2 students provided positive feedback with more consistent responses, reflecting shared moderate satisfaction. In contrast, School 3 students reported the lowest scores, expressing lower satisfaction, especially with product variety, privacy, and delivery. Improving security, reliability, and user-friendliness, along with enhanced data protection, timely delivery, and expanded product options, could increase overall satisfaction and loyalty among student shoppers.

6.2. Information Quality

Across all schools, students found the quality of product information acceptable but not excellent. School 1 had the highest mean satisfaction (4.13), particularly regarding information quality and delivery, though responses varied. School 2 followed with a mean of 4.08, indicating generally acceptable information, though some students desired clearer communication. School 3 reported the lowest mean (3.90) with the most varied opinions, reflecting dissatisfaction and inconsistent experiences. Overall, students agreed that product information is adequate but could be enhanced. Clearer, more consistent, up-to-date, and engaging content would likely improve user satisfaction.

6.3. Privacy Concerns

Students generally believed that online shopping platforms handle privacy adequately but not perfectly. Schools 1 and 2 reported average scores of 4.11, indicating moderate satisfaction with privacy practices, though many felt that policies could be explained more clearly. School 1 students indicated that platforms only requested necessary information, yet policies were complex and difficult to interpret. School 2 students expressed similar sentiments, trusting the platforms partially but seeking greater transparency. School 3 had the lowest mean score (3.92) and the widest range of opinions, showing uncertainty about personal information protection. Overall, clearer and more trustworthy privacy policies could enhance confidence in online shopping.

6.4. Perceived Security

Students perceived online shopping websites as generally secure but still held some doubts. School 1 had an average score of 4.09, reflecting moderate confidence in payment information protection, though some uncertainty remained regarding data usage. School 2 students reported slightly higher scores (4.10), indicating somewhat greater confidence but still concerns over potential data misuse. School 3 had the lowest confidence (3.84), with a wider range of opinions about online security. Overall, students perceive online shopping as fairly safe but not entirely reliable. Explicit communication regarding data and payment protection could strengthen user trust.

6.5. Product Variety

Students considered product variety acceptable but saw room for improvement. School 1 rated the highest (mean = 4.13), with students generally satisfied with the range of similar products, though not all opinions were positive. School 2 had a mean of 4.08, perceiving the product range as adequate but not particularly exciting. School 3 gave the lowest score (3.84) with mixed feedback, indicating some students found choices sufficient while others wanted more variety and clearer listings. Expanding the product range and presenting items more clearly could improve satisfaction.

6.6. Product Delivery

Delivery services were generally deemed acceptable but not excellent. School 1 gave the highest rating (mean = 4.15), noting that deliveries were mostly on time, correctly packaged, and satisfactory overall, although improvements in speed and reliability were suggested. School 2 followed closely (mean = 4.13), with students generally satisfied but recommending greater consistency and better packaging. School 3 reported the lowest rating (3.84) with mixed experiences, including occasional issues with receiving correct items. Overall, while delivery performance is adequate, improvements in accuracy, speed, and consistency are needed to meet expectations.

6.7. Customer Satisfaction

Overall satisfaction with the online shopping experience was moderate across all schools, indicating that services are acceptable but not outstanding. School 1 reported a mean score of 4.02, reflecting general approval with room for enhancement. School 2 rated slightly higher at 4.08, though opinions varied, showing that some students were satisfied while others had less positive experiences. School 3 had the lowest mean score (3.87), with mixed views-some students were satisfied, while others were less so. To increase customer satisfaction, platforms should focus on improving usability, enhancing the shopping experience, and providing more customer-friendly services.

6.8. Customer Loyalty

Students from all three schools demonstrated only moderate loyalty to the online company-they generally liked the platform but were not fully committed. School 1 had an average loyalty score of 4.03, indicating that many students would recommend or reuse the platform, while some remained uncertain. School 2 reported slightly stronger loyalty with a score of 4.14, particularly in willingness to recommend, though opinions still varied. In School 3, a strong correlation ($r = 0.776$, $p < 0.001$) between satisfaction and loyalty indicated that more satisfied customers were significantly more likely to remain loyal. Overall, students showed moderate attachment, suggesting that improvements in service quality, clearer communication, and a more enjoyable shopping experience could further strengthen loyalty.

6.9. Relationship between Customer Satisfaction and Customer Loyalty

Across all schools, a strong and positive relationship was observed between customer satisfaction and loyalty. In School 1, the correlation of 0.694 ($p < 0.001$) from 563 responses indicated that satisfied users were more likely to continue using the platform and recommend it to others. School 2 showed a similar trend with a correlation of 0.705 ($p < 0.001$) from 505 respondents, confirming that higher satisfaction contributes to stronger loyalty. School 3 had the strongest association, with a correlation of 0.776 ($p < 0.001$) from 618 students, demonstrating that greater satisfaction leads to higher retention and advocacy. These results highlight that enhancing user satisfaction is critical for cultivating loyalty.

6.10. Relationship between Online Shop Attributes and Customer Satisfaction

Results revealed a very strong positive relationship between online shop features—such as product information, delivery, privacy, and security—and customer satisfaction. School 1 reported a correlation of 0.776 ($p < 0.001$), indicating that clear, secure, and reliable shop features substantially improve satisfaction. School 2 recorded 0.752 ($p < 0.001$), showing that better product details, delivery, and security contribute to happier users. School 3 had the highest correlation of 0.811 ($p < 0.001$), confirming that satisfaction increases when the platform excels in product variety, speed, and safety. Overall, improving these attributes directly enhances customer satisfaction.

6.11. Relationship between Online Shop Attributes and Customer Loyalty

A very strong positive association was also observed between online shop features and user loyalty. School 1 showed a correlation of 0.756 ($p < 0.001$), indicating that users were more loyal when offered better product options, faster delivery, and stronger privacy protections. School 2 yielded a correlation of 0.754 ($p < 0.001$), suggesting that loyalty rises when customers are satisfied with the platform's service quality. School 3 had the strongest relationship at 0.809 ($p < 0.001$), demonstrating that loyalty strengthens when the site provides secure transactions, clear product information, and efficient delivery. Overall, superior online shop attributes directly contribute to greater user loyalty and likelihood of recommendation.

6.12. Mediating Effect of Customer Satisfaction between Online Shop Attributes and Customer Loyalty

Findings indicate that customer satisfaction plays a critical mediating role between online shop attributes and customer loyalty. In School 1, a correlation of 0.756 ($p < 0.001$) from 563 responses showed that loyalty increased when customers were satisfied with product variety, delivery reliability, and privacy or security measures. School 2 demonstrated that satisfaction affected loyalty both indirectly (0.666) through positive perceptions of shop features and directly (0.178), resulting in a total effect of 0.844, illustrating that high-quality features amplify the impact of satisfaction. Similarly, School 3 showed an indirect effect of 0.685 and strong paths from satisfaction to feature perception (0.863) and from features to loyalty (0.794), resulting in a total effect of 0.858, confirming that enhanced shop features make satisfaction more influential. Overall, these findings suggest that while satisfaction drives loyalty, its effect is maximized when supported by clear, reliable, and secure online shop features. Online companies should therefore focus not only on satisfying customers but also on continuously improving the overall shopping experience to foster stronger loyalty.

7. Conclusions and Recommendations

7.1. Conclusions

The study concludes that online shopping platforms meet the basic expectations of students; but overall satisfaction remains moderate across the three schools. Students acknowledged the adequacy of product information and security measures; yet concerns persist regarding delivery reliability; product variety; and the clarity and trustworthiness of privacy policies. These findings highlight the need for online retailers to enhance transparency; improve service quality; and address diverse user expectations to foster stronger trust; satisfaction; and long-term loyalty among student consumers.

Students exhibited only moderate trust in the platforms, perceiving them as generally secure, functional in delivery, and offering a fair range of products. However, concerns regarding data protection, limited product variety, and inconsistent delivery services indicate that expectations are not fully met. To build stronger trust and satisfaction, online shops should improve transparency in security practices, expand product options, and enhance delivery reliability.

Overall, students' satisfaction and loyalty were moderate; while the platforms were functional and usable, the lack of a consistently enjoyable, user-friendly, and trustworthy experience limited both satisfaction and long-term commitment. The findings underscore a strong link between customer satisfaction and loyalty, emphasizing that improving satisfaction is essential to fostering sustained commitment. Enhancing service quality, security, product variety, delivery, and overall user experience is therefore critical for strengthening student loyalty.

7.2. Recommendations

Based on the study findings, the following recommendations are proposed to improve the online shopping experience and foster stronger satisfaction and loyalty among students:

1. Enhance Security and Privacy

- Clearly communicate data protection measures and privacy policies.
- Ensure transparency regarding the collection, storage, and use of personal and payment information to build trust.

2. Improve Delivery Services

- Focus on faster, more accurate, and more reliable shipping.
- Optimize logistics performance to minimize errors, delays, and damages.

3. Expand Product Variety and Information Quality

- Offer a wider selection of products that meets diverse student needs.
- Present product details in a clear, consistent, and engaging manner, making the interface more user-friendly.

4. Enhance Website Usability and Overall User Experience

- Improve website navigation, responsiveness, and interactivity to create a more enjoyable shopping experience.
- Ensure that every interaction with the platform reinforces trust and satisfaction.

5. Adopt a Holistic Approach to Customer Satisfaction and Loyalty

- Invest in both service quality and platform features, including secure payment systems, reliable delivery, and personalized recommendations.
- By improving both the shopping environment and operational performance, platforms can transform moderate satisfaction into strong, long-term loyalty.

7.3. Recommendations for Future Research

Future studies could explore additional factors influencing student satisfaction and loyalty, such as:

- User interface design, mobile shopping experience, and customer service responsiveness.
- Differences in shopping behavior across age groups, income levels, or academic backgrounds.
- Cross-platform comparisons of major e-commerce sites to identify best practices that maximize satisfaction and loyalty among student consumers.

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