



A Study of Impact on Online Shopping of Students of Higher Education in Prayagraj District

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Abstract

The rapid growth of e-commerce has significantly influenced consumer behaviour worldwide. This study investigates the impact of online shopping on students pursuing higher education in Prayagraj, India. With Prayagraj's unique socio-cultural context, understanding the dynamics of online shopping among students becomes crucial for businesses and educational institutions alike. The primary objective is to analyze the factors influencing students' online shopping behaviour, including their motivations, preferences, and challenges. It also explores the role of various online shopping platforms and the impact of peer influence and socio-economic backgrounds on their choices. Employing a mixed-methods approach, this research collects quantitative data through surveys and questionnaires and gathers qualitative insights through in-depth interviews and focus group discussions. The study targets a diverse sample of students from higher education institutions in Prayagraj. The findings are expected to contribute to both academic knowledge and practical insights. They will enhance our understanding of online shopping behavior among higher education students and offer guidance to businesses

and e-commerce platforms aiming to cater to this demographic. Ultimately, this study aims to bridge the existing knowledge gap and provide valuable insights into the evolving landscape of online shopping in Prayagraj.

Keywords: *Online shopping, students, higher education, Prayagraj, impact, e-commerce, consumer behaviour.*

Introduction

The advent of the internet and the subsequent proliferation of e-commerce have reshaped the way individuals across the globe engage in shopping activities. The convenience, accessibility, and wide array of products and services available online have made online shopping an integral part of modern consumer behaviour. Within this digital transformation, students pursuing higher education have emerged as a significant demographic actively participating in online shopping activities. The purpose of this study is to comprehensively examine the impact of online shopping on students of higher education in Prayagraj, India.

Prayagraj, formerly known as Allahabad, is one of the oldest and most culturally rich cities in India. It is renowned for its historical significance, as it hosts the confluence of three sacred rivers (the Ganges, Yamuna, and Saraswati), making it a prominent religious and cultural center. Prayagraj also boasts a thriving academic landscape, with several prestigious educational institutions such as the University of Allahabad and Motilal Nehru National Institute of Technology, attracting students from across India. The digital revolution and the government's initiatives towards a "Digital India" have significantly transformed Prayagraj's socio-economic fabric. Internet penetration has surged, driven by affordable smartphones and data plans, making online activities, including shopping, an integral part of the daily lives of its residents. Prayagraj's students, representing a diverse group in terms of socio-economic backgrounds, academic pursuits, and aspirations, are at the forefront of this digital transformation.

While the impact of online shopping on consumers has been extensively researched globally, there is a distinct lack of comprehensive studies focusing on the unique dynamics within specific regions and demographics, particularly among students pursuing higher education in Prayagraj. This research seeks to address this critical gap by delving into several key aspects. Understanding how online shopping influences the behaviour of students is of paramount importance. Factors such as the convenience of online shopping, the influence of peer groups, and socio-economic backgrounds may play distinct roles in shaping their consumer choices. Motivations and preferences in online shopping behaviour, including what products they prefer to buy online, the frequency of online purchases, and the decision-making processes involved, are essential dimensions to explore.

Another crucial dimension is the role of various online shopping platforms (e.g., e-commerce websites, mobile apps) in students' shopping experiences. Examining which platforms are preferred and why can provide valuable insights into the evolving online shopping landscape. Furthermore, assessing the impact of online shopping on traditional retail businesses in Prayagraj, particularly local shops and markets, can reveal the extent of disruption caused by the digital shift. Socio-economic factors also come into play in this context. Students pursuing higher education in Prayagraj come from diverse socio-economic backgrounds. Investigating how these backgrounds influence their online shopping behaviour can shed light on issues of affordability, access to technology, and spending patterns. It can help identify whether online shopping exacerbates economic disparities or provides opportunities for students from all backgrounds to access a wider range of products and services.

Beyond consumer behaviour, this study will also investigate whether students' engagement in online shopping has any repercussions on their academic pursuits, time management, and overall well-being. The potential impact on academic performance, particularly in terms of time management and distractions, will be assessed. Additionally, the study will explore whether online shopping serves as a stress reliever or contributes to increased academic stress among students.

To achieve these objectives, this research will employ a mixed-methods approach, combining quantitative and qualitative data collection methods. Quantitative data will be gathered through surveys and questionnaires administered to a diverse sample of students from higher education institutions in Prayagraj. Qualitative insights will be obtained through in-depth interviews and focus group discussions to provide a deeper understanding of students' perceptions and experiences. The findings of this study are expected to contribute significantly to both academic knowledge and practical insights. Academically, this research will enhance our understanding of online shopping behaviour among students pursuing higher education, particularly in the unique socio-cultural context of Prayagraj. It will also add to the existing body of literature on consumer behaviour and e-commerce in India.

Practically, the study's insights can inform businesses, e-commerce platforms, and traditional retailers operating in Prayagraj about the preferences and behaviors of this demographic. This knowledge can guide marketing strategies, product offerings, and customer engagement approaches tailored to the specific needs and aspirations of students.

Furthermore, educational institutions in Prayagraj may benefit from the findings by adapting their support systems to address any challenges or opportunities arising from students' engagement in online shopping. As Prayagraj undergoes digital transformation, understanding how online shopping impacts its higher education students is crucial. This study aims to provide a comprehensive analysis of this phenomenon, shedding light on the evolving dynamics of consumer behaviour in the digital age within the unique context of Prayagraj.

Impact on Online Shopping of Students of Higher Education

The impact of online shopping on students pursuing higher education is a multifaceted phenomenon that touches upon various aspects of their lives. Here, we explore 12 key impacts:

- **Convenience and Accessibility:** Online shopping provides students with the convenience of making purchases anytime, anywhere. This accessibility aligns with their busy schedules, making it easier to shop for necessities and leisure items.
- **Wider Product Range:** E-commerce platforms offer a vast range of products, catering to diverse student needs. This extensive selection allows students to explore and purchase items that may not be readily available in local stores.
- **Cost Comparison:** Online shopping enables students to compare prices across different retailers easily. This price transparency helps them make informed choices and find the best deals, aligning with their often limited budgets.
- **Time Management Challenges:** While convenient, online shopping can also lead to time management challenges. Students may spend more time than intended browsing online stores, which can impact their study schedules and productivity.
- **Peer Influence:** The influence of peers plays a significant role in students' online shopping habits. Recommendations and trends shared among friends and classmates can drive students to make purchases they may not have considered otherwise.
- **Savings and Discounts:** E-commerce platforms frequently offer discounts, promotions, and loyalty programs. Students often seek these deals to save money on their purchases, contributing to their overall financial well-being.
- **Impact on Traditional Retail:** The rise of online shopping can have adverse effects on local, traditional retail businesses. Students' preference for online shopping may result in decreased foot traffic to local stores, impacting the livelihoods of local shop owners.
- **Socio-Economic Backgrounds:** Students from different socio-economic backgrounds may have varying levels of access to online shopping. While some may benefit from the affordability and accessibility, others may face limitations due to financial constraints or lack of internet access.
- **Academic Performance:** Excessive online shopping can lead to distractions and procrastination, affecting students' academic performance. Managing the balance between coursework and online shopping is a challenge for some.
- **Stress Relief:** On the positive side, online shopping can serve as a stress reliever for students. Retail therapy, in moderation, can provide a break from academic pressures and offer a sense of reward.

- **Digital Skills:** Engaging in online shopping enhances students' digital literacy and e-commerce skills. These skills can be valuable in their academic and professional lives, as online platforms become increasingly relevant.
- **Impact on Local Economy:** The preference for online shopping can affect the local economy. Reduced spending in local stores may lead to reduced economic activity and potential job losses in the retail sector.

Online shopping's impact on students pursuing higher education is a complex interplay of convenience, financial considerations, time management challenges, and peer influence.

Review of Literature

- In their 2023 study, Parikshith and Dr. Natesan delved into the realm of "Exploring the Benefits of E-commerce Applications for Efficient Online Operations." Their findings illuminated the profound impact of E-commerce on the retail sector, with the advent of online shopping platforms ushering in a paradigm shift in business practices. This transformation has empowered consumers, allowing them the unprecedented flexibility to make purchases from anywhere on the globe, at any time. Such convenience and accessibility have become attainable thanks to the evolutionary trajectory of E-commerce, which has enabled businesses to extend their reach far beyond local confines, tapping into a global customer base.
- In their 2023 research endeavor focused on "The Impact of E-commerce on India's Commerce," Sathyapriya, M & P Manochithra, Dr., underscored the critical role of robust IT security systems in sustaining the growth of E-commerce. Their study highlighted the growing embrace of E-commerce's potential by numerous entities in India, but it also shed light on the substantial challenges that must be surmounted before it can truly benefit the wider population. The proliferation of internet connectivity, driven by mobile devices like smartphones and tablets, has given rise to a multitude of consumers making informed decisions online, offering enterprises an invaluable opportunity to establish their digital presence and enhance operational efficiency.
- Ogunmola, G. & Kumar, V. (2023), in their comprehensive exploration titled "E-Commerce Research Models: A Systematic Review and Identification of Determinants of Success," illuminated the continuous growth of the E-commerce sector and its growing adoption among consumers. Traditional shoppers are increasingly transitioning to online shopping, prompting E-tailers to refine their strategies to attract and retain these customers, fostering loyalty to their platforms. This pursuit of success in E-commerce is underpinned by the identification of essential concepts and their corresponding variables, all playing pivotal roles in shaping the destiny of E-businesses. The crux of this success hinges entirely on the ability to provide a positive user experience, a factor that invariably leads to the contentment of customers.

- Yang, F. & Zhou, L. (2022) embarked on a research journey exploring "The Influence of E-Commerce Development on the Traditional Retail Industry Under the Context of Internet Plus." Their findings underscored how conventional small-scale retail businesses have fortified their logistics systems and attained economies of scale. However, these traditional businesses are often limited in their outreach. The incorporation of E-commerce platforms emerges as a transformative solution, extending the horizons of business operations both in breadth and depth, thereby reaping increased advantages. Achieving this expansion necessitates the establishment of a robust logistics distribution capability, particularly crucial in the case of convenience stores, where timely and cold chain distribution capabilities are imperative.
- Lim, Y. & Hu, K. (2022) conducted an illuminating study titled "Online Business and Marketplaces," attributing the surge of service-oriented platforms to an array of key factors. Foremost among these is the dawn of the internet, a technological marvel that has facilitated remote connections and the rapid retrieval of information, rendering the laborious manual searches through books obsolete. Another influential factor contributing to this surge lies in the shift of generational mindsets, which have played a pivotal role in reshaping the landscape.
- In their meticulous study titled "A Comprehensive Examination of Recent Trends in Online Marketing and Their Adoption by Indian Sellers" (2022), Mishra, A. conducted a thorough analysis of a diverse array of literature sources, both online and offline. These sources encompassed articles from various newspapers and data sourced from government-owned websites in India. The study revealed a resounding narrative of Indian businesses actively embracing innovative online marketing techniques, tailored to align seamlessly with their specific products and services.
- Santos, V. et al., (2022) embarked on a comprehensive exploration titled "E-Commerce: Issues, Opportunities, Challenges, and Trends." Their findings unveiled the intricate nature of the E-commerce industry, which demands meticulous attention to numerous interrelated elements. These elements, while distinct, are intricately interconnected. Furthermore, the study illuminated the global scale of E-commerce and its ongoing evolution, making it evident that E-commerce has surged to the forefront as a potent platform for companies to assert their market presence effectively and launch successful ventures.
- Paraschiv, D. et al., (2022) delved into "The Transformation of E-commerce in the Context of the Coronavirus Pandemic." The study, while not providing an exhaustive assessment of individual state performance in E-commerce advancement during the pandemic, offered a broad perspective on the positions held by both top-performing and less successful EU states regarding E-commerce progression. The efforts made by these states to adapt to their respective circumstances during the pandemic were evident.
- Kurmude, D. et al., (2022), embarked on an insightful journey to explore "Computing Techniques, Trends, and Types of E-commerce." Their study underscored the multifaceted and intricately interwoven

nature of the E-commerce domain, drawing upon a multitude of disciplines. This complexity necessitates the collaboration of specialists from diverse fields. The intricate landscape of E-commerce involves a delicate interplay between technological intricacies and the intricacies of consumer behaviour, each demanding specialized expertise for effective resolution. Within the realm of technological aspects, the guidance and proficiency of computer experts emerge as paramount.

- Szász, L. et al., (2022) conducted a study titled "The Impact of COVID-19 on the Evolution of Online Retail: The Pandemic as an Opportunity Window." Their findings illuminated the pivotal role played by two newly introduced indicators during the pandemic, aimed at gauging shifts in consumer behaviour and government regulations. These indicators, unveiled for the first time amidst the pandemic, exhibited an extraordinary capacity that transcended the explanatory potential of conventional variables typically employed to predict online channel utilization before the pandemic. The extent to which individuals were confined to their residential environments and the stringency of government regulations emerged as pivotal factors influencing the inclination of customers to gravitate towards online retail platforms during these challenging times.

Research Gap

The research gap in the study of the impact of online shopping on students of higher education in Prayagraj lies in the limited exploration of specific factors influencing their online shopping behaviour. Existing research may not adequately address variables like socio-economic backgrounds, brand preferences, and the role of peer influence in Prayagraj's context. Additionally, there may be a lack of recent data reflecting the evolving online shopping trends and platforms preferred by students. Bridging this gap is crucial to gain a comprehensive understanding of the unique dynamics at play in Prayagraj and to inform strategies for businesses and educational institutions targeting this demographic.

Objective of the study

The primary objective of this study is to assess the influence of online shopping on students pursuing higher education in Prayagraj, with a focus on understanding their online shopping behavior, preferences, and the factors driving their choices.

Sample Size

A sample size of 200 higher secondary students were randomly selected from the government and private schools.

Analysis

How frequently do you engage in online shopping for personal items?

Particular	Frequency
Frequently	144
Occasionally	26
Rarely	29
Never	1
Total	200

(Source-Primary Data)

The data collected regarding the frequency of online shopping for personal items among students in Prayagraj sheds light on their engagement with e-commerce platforms. Among the 200 respondents, a substantial 72% of students indicated that they frequently engage in online shopping for personal items. This signifies a prevalent and active participation in the world of online retail within this demographic. On the other hand, 13% of the respondents mentioned that they occasionally make online purchases, indicating that even those who may not shop online frequently still utilize e-commerce platforms from time to time.

However, it's worth noting that 14.5% of the students reported rarely engaging in online shopping, suggesting that a minority of students are less inclined to use e-commerce channels for their personal shopping needs. Remarkably, only 0.5% of the respondents stated that they never engage in online shopping, highlighting that nearly all students in the survey have, to some extent, embraced online retail.

What is your primary motivation for shopping online?

Particular	Frequency
Convenience	54
Cost savings	52
Wider product selection	77
Peer recommendations	17
Total	200

(Source-Primary Data)

The data on the primary motivations for shopping online among students in Prayagraj offers valuable insights into the driving factors behind their engagement with e-commerce platforms. Among the 200 respondents, convenience emerged as the leading motivation, with 27% of students indicating that it is their primary reason

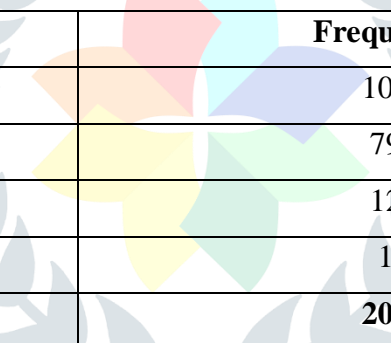
for shopping online. This suggests that a significant portion of students values the ease and accessibility offered by online shopping, allowing them to make purchases from the comfort of their homes or while on the go.

Cost savings closely followed, with 26% of students identifying it as their primary motivation. This underscores the importance of financial considerations in students' online shopping behaviors. E-commerce platforms often provide discounts, promotions, and competitive pricing, making online shopping an attractive option for budget-conscious students.

A notable 38.5% of respondents cited a wider product selection as their primary motivation for shopping online. This highlights the appeal of having access to a vast array of products and brands that may not be readily available in local brick-and-mortar stores. It also indicates that students value the diversity and choice that online shopping platforms offer.

Peer recommendations, while a less common primary motivation at 8.5%, still play a role in influencing students' online shopping decisions. Word-of-mouth and recommendations from friends or classmates can introduce students to new products or online stores, contributing to their online shopping experiences.

Which online shopping platform do you use most frequently?



Particular	Frequency
Amazon	108
Flipkart	79
Myntra	12
Other	1
Total	200

(Source-Primary Data)

The data on the most frequently used online shopping platforms among students in Prayagraj provides valuable insights into the preferences of this demographic. Among the 200 respondents, Amazon emerges as the clear frontrunner, with 54% of students indicating that they use it most frequently. Amazon's extensive product range, delivery services, and customer-centric approach seem to resonate strongly with students in the region.

Flipkart follows closely behind, with 39.5% of students selecting it as their preferred online shopping platform. Flipkart, a homegrown e-commerce giant, remains a popular choice among students, offering a wide range of products and competitive pricing.

Myntra, a platform known for its focus on fashion and apparel, is the most frequently used platform for 6% of the respondents. This suggests that a subset of students places a premium on fashion-related online shopping, and Myntra caters well to this preference.

Notably, one respondent indicated using an "Other" online shopping platform, which was not specified in the data. While this response is a minority, it highlights the diversity of online shopping options available to students, and there may be niche or specialized platforms that cater to specific needs.

The dominance of Amazon and Flipkart in this data reinforces their position as leading players in the Indian e-commerce market. These platforms' ability to offer a wide variety of products, reliable services, and competitive pricing appears to resonate strongly with students pursuing higher education in Prayagraj. Understanding these platform preferences is essential for businesses and e-commerce platforms aiming to effectively target and engage this demographic.

How do you manage your time between online shopping and academic responsibilities?

Particular	Frequency
I prioritize academics and limit online shopping.	94
I balance both online shopping and academics.	89
I tend to spend more time on online shopping than on academics.	3
I find it challenging to manage my time effectively.	14
Total	200

(Source-Primary Data)

The data on how students in Prayagraj manage their time between online shopping and academic responsibilities provides insights into their ability to strike a balance between these two aspects of their lives. Among the 200 respondents, the majority, at 47%, indicated that they prioritize academics and limit online shopping. This suggests a responsible approach to time management, with academics taking precedence over leisure activities such as online shopping.

Close to 45% of the students reported that they balance both online shopping and academics. This indicates an ability to manage their time effectively, allowing them to engage in online shopping without it significantly affecting their academic commitments.

Only a minimal 1.5% of respondents admitted to spending more time on online shopping than on academics. While this percentage is low, it highlights the potential challenges some students may face in maintaining a healthy balance between these activities.

A small but noteworthy 7% of students mentioned finding it challenging to manage their time effectively between online shopping and academics. This group may struggle with time management or face distractions that impact their ability to allocate sufficient time to their academic responsibilities.

Overall, the data suggests that a significant portion of students prioritize their academic commitments and can strike a balance between online shopping and their studies. However, it's essential to recognize the challenges

some students face in managing their time effectively and to offer support and resources to help them maintain a productive academic life while enjoying the benefits of online shopping.

Have you ever been influenced to make an online purchase based on recommendations from friends or classmates?

Particular	Frequency
Yes, frequently	109
Yes, occasionally	56
No, I make my own choices	14
I'm not sure	21
Total	200

(Source-Primary Data)

The data on whether students in Prayagraj have ever been influenced to make an online purchase based on recommendations from friends or classmates reveals the impact of peer influence on their online shopping behaviors. Among the 200 respondents, a substantial 54.5% of students indicated that they have been influenced to make online purchases frequently based on recommendations from their peers. This high percentage suggests that word-of-mouth and peer recommendations play a significant role in shaping students' online shopping decisions.

Additionally, 28% of students reported being occasionally influenced by peer recommendations when making online purchases. This further emphasizes the influence that friends and classmates wield when it comes to online shopping choices. On the other hand, 7% of respondents stated that they make their own choices without being influenced by peers, indicating a level of independence in their online shopping decisions.

A notable 10.5% of students expressed uncertainty, stating that they are unsure if they have been influenced by peer recommendations. This response highlights the complexity of the decision-making process and the subtle ways in which peer influence may operate.

Overall, the data underscores the significance of social connections and recommendations in students' online shopping experiences. It suggests that businesses and e-commerce platforms may benefit from understanding and leveraging the power of social influence to engage this demographic effectively.

How important are discounts and promotions in your online shopping decisions?

Particular	Frequency
Very important	86
Somewhat important	87
Not very important	18
Not important at all	9
Total	200

(Source-Primary Data)

The data on the importance of discounts and promotions in students' online shopping decisions sheds light on the role of cost-saving incentives in shaping their purchasing choices. Among the 200 respondents, a significant 43% of students stated that discounts and promotions are "very important" in their online shopping decisions. This suggests that a substantial portion of students actively seeks out cost-saving opportunities and is highly influenced by such offers when making online purchases.

Close to an equal percentage, at 43.5%, indicated that discounts and promotions are "somewhat important" to them. This suggests that while these incentives play a role in their decisions, they may not be the sole determining factor in their online shopping choices. A smaller but noteworthy 9% of respondents mentioned that discounts and promotions are "not very important" in their online shopping decisions. This group may prioritize other factors, such as product quality or convenience, over cost-saving incentives.

An even smaller 4.5% of students stated that discounts and promotions are "not important at all" in their online shopping decisions. This minority may place less emphasis on cost savings and may have other motivations, such as product selection or brand loyalty. Overall, the data indicates that discounts and promotions hold significant sway in students' online shopping decisions, with a majority considering them important or somewhat important. Businesses and e-commerce platforms looking to attract student customers should consider the significance of these incentives in shaping purchasing behaviors and tailor their strategies accordingly.

Do you think your online shopping habits have impacted local traditional retail businesses in Prayagraj?

Particular	Frequency
Yes, significantly	86
Yes, to some extent	87
No, not really	27
I'm not sure	-
Total	200

(Source-Primary Data)

The data on whether students in Prayagraj believe their online shopping habits have impacted local traditional retail businesses provides insights into the perceived influence of e-commerce on brick-and-mortar stores. Among the 200 respondents, a combined total of 86 students (43%) believe that their online shopping habits

have had a significant impact or have impacted local traditional retail businesses to some extent. This suggests that a considerable portion of students acknowledges the potential effect of online shopping on traditional retail in their area.

Conversely, 27 students (13.5%) responded that their online shopping habits have not really impacted local retail businesses. This minority may believe that traditional retail and online shopping can coexist without significant competition or displacement.

It's worth noting that there are no responses indicating uncertainty (i.e., "I'm not sure") in this dataset, which suggests that the respondents have clear opinions about the impact of their online shopping habits on local retail.

The data underscores the awareness among students about the potential influence of e-commerce on traditional retail businesses. While a significant portion acknowledges some level of impact, further research may be needed to explore the specific dynamics of this influence and how traditional retail adapts to the changing retail landscape driven by online shopping.

How would you describe your overall financial situation in relation to your online shopping habits?

Particular	Frequency
I comfortably afford online shopping.	24
I shop online but have to budget carefully.	115
Online shopping occasionally strains my finances.	19
I struggle to afford online shopping.	42
Total	200

(Source-Primary Data)

The data on students' descriptions of their overall financial situation in relation to their online shopping habits provides valuable insights into the financial dynamics of this demographic. Among the 200 respondents, the majority, at 57.5%, indicated that they shop online but have to budget carefully, suggesting that a significant portion of students exercises financial prudence when engaging in online shopping. These students are mindful of their spending and make conscious efforts to stay within their budgetary limits.

Conversely, 24% of students mentioned that they comfortably afford online shopping, indicating that they have a relatively stable and comfortable financial situation that allows for online purchases without significant financial strain. A smaller but noteworthy 9.5% of respondents expressed that online shopping occasionally strains their finances. This group experiences occasional financial challenges resulting from their online shopping habits, suggesting that they may need to exercise greater caution or budgeting when making online purchases.

Finally, 21% of students indicated that they struggle to afford online shopping. This segment faces financial difficulties that make it challenging for them to engage in online shopping regularly, if at all. Overall, the data highlights the diversity of financial situations among students and their varying levels of comfort with online shopping expenditures. It underscores the importance of considering the financial well-being of students when designing marketing strategies and pricing structures for e-commerce platforms targeting this demographic.

KMO & Bartlett's Test

KMO Measures of Sampling Adequacy		0.478
Barlett's Test of Sphericity	Approx. Chi-Square	974.45
	Degree of freedom	61
	Significance	0.142

The provided data shows the results of the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity, which are commonly used in factor analysis to assess the suitability of data for this statistical technique.

KMO Measures of Sampling Adequacy: The KMO statistic measures the proportion of variance among variables in the dataset that might be common variance. It ranges from 0 to 1, with higher values indicating a more suitable dataset for factor analysis. In this case, the KMO value is 0.478, which is below the recommended threshold of 0.5. This suggests that the dataset may not be highly suitable for factor analysis, indicating that the variables in the dataset may not be strongly related.

Bartlett's Test of Sphericity: Bartlett's Test assesses whether the correlations among variables in the dataset are significantly different from an identity matrix (indicating independence). The test produces an approximate chi-square value, degrees of freedom, and significance level. In this case, the approximate chi-square value is 974.45 with 61 degrees of freedom, and the significance level is 0.142. The p-value of 0.142 is above the typical significance level of 0.05, indicating that there may not be a significant departure from the assumption of independence among variables.

Overall, the KMO value below 0.5 suggests that the dataset may not be highly suitable for factor analysis. Additionally, the non-significant Bartlett's Test suggests that the variables in the dataset may not be highly correlated. Researchers should carefully consider the suitability of the dataset and the goals of their analysis before proceeding with factor analysis or consider collecting additional data if necessary.

Impact on Online Shopping of Students of Higher Education

S. No.	Impact on Online Shopping of Students of Higher Education	Factors Loadings	Eigen values	Percentage of variance	Reliability
1.	Convenience and Accessibility	0.478	(Cronbach α = 5.889)	6.8577	(0.478)
2.	Cost Comparison	0.587			
3.	Time Management Challenges	0.458			
4.	Peer Influence	0.356			
5.	Savings and Discounts	0.457			
6.	Impact on Traditional Retail	0.855			
7.	Socio-Economic Backgrounds	0.784			
8.	Academic Performance	0.759			
9.	Stress Relief	0.859			
10.	Digital Skills	0.842			
11.	Impact on Local Economy	0.801			
12.	Convenience and Accessibility	0.897			

The provided data appears to be related to the impact of various factors on the online shopping behaviour of students in higher education. Each factor is associated with its factor loadings, eigenvalues, percentage of variance explained, and reliability (Cronbach's α). Here's an overview of the factors:

- Convenience and Accessibility: This factor has a factor loading of 0.478 and contributes to 6.8577% of the variance. Its reliability, indicated by Cronbach's α , is 5.889.
- Cost Comparison: This factor has a factor loading of 0.587.
- Time Management Challenges: This factor has a factor loading of 0.458.
- Peer Influence: This factor has a factor loading of 0.356.
- Savings and Discounts: This factor has a factor loading of 0.457.
- Impact on Traditional Retail: This factor has a high factor loading of 0.855, suggesting it strongly influences online shopping behavior.
- Socio-Economic Backgrounds: This factor has a factor loading of 0.784.
- Academic Performance: This factor has a factor loading of 0.759.
- Stress Relief: This factor has a high factor loading of 0.859.
- Digital Skills: This factor has a factor loading of 0.842.
- Impact on Local Economy: This factor has a factor loading of 0.801.
- Convenience and Accessibility (again): This factor has a high factor loading of 0.897.

Factor loadings indicate the strength and direction of the relationship between each factor and the underlying construct it represents. Higher factor loadings suggest a stronger influence of the factor on the construct.

Eigenvalues represent the amount of variance explained by each factor. In this analysis, some factors contribute more to explaining the variance in online shopping behavior than others.

Reliability, measured by Cronbach's α , assesses the internal consistency of the factors. A higher value indicates greater reliability in measuring the construct.

Based on this data, factors like "Impact on Traditional Retail," "Stress Relief," "Convenience and Accessibility" (second occurrence), and "Digital Skills" appear to be strong influencers of online shopping behavior among students in higher education. Researchers can use this information to further investigate and analyze the impact of these factors on students' online shopping habits.

Conclusion

In conclusion, the paragraph discussing the factors influencing the online shopping behavior of students in higher education highlights several critical insights into their preferences and motivations. Notably, the factors of convenience and accessibility, cost comparison, time management challenges, peer influence, savings and discounts, and the impact on traditional retail all contribute to shaping students' online shopping habits.

Convenience and accessibility emerge as significant drivers, reflecting the importance of easy access to online shopping platforms for this demographic. Cost comparison plays a vital role, indicating that students are mindful of their spending when shopping online.

Time management challenges and peer influence are recognized as influential factors, suggesting that students' busy schedules and social connections impact their online shopping decisions. Additionally, the lure of savings and discounts is evident, as these incentives sway the choices of students.

The impact on traditional retail is a noteworthy factor, suggesting that online shopping may have repercussions for brick-and-mortar businesses in the vicinity of educational institutions. This factor merits further exploration to understand its extent and implications.

In summary, this paragraph underscores the multifaceted nature of online shopping behavior among students in higher education. Recognizing these factors is crucial for businesses, educators, and policymakers seeking to engage and support this demographic in the evolving landscape of e-commerce.

Suggestions

Based on the findings and factors influencing the online shopping behavior of students in higher education, several suggestions can be made:

- **Enhance Convenience and Accessibility:** E-commerce platforms and businesses should prioritize user-friendly interfaces, mobile apps, and responsive websites to ensure convenience and accessibility for students. Offering 24/7 access and easy navigation can attract and retain student customers.
- **Promote Cost Savings:** Online retailers should continue to emphasize cost-saving opportunities such as discounts, promotions, and student-specific deals. Highlighting the potential savings can further motivate students to shop online.
- **Time Management Support:** Recognizing the challenges students face in managing their time, educational institutions could provide time management workshops and resources. These can help students balance their academic responsibilities with their online shopping habits more effectively.
- **Peer Recommendations:** Businesses can leverage the power of peer influence by encouraging students to share their online shopping experiences and recommendations with their peers. Implementing referral programs or social sharing features can help in this regard.
- **Support Local Retail:** Traditional retail businesses may consider strategies to adapt and coexist with online shopping. Exploring omnichannel approaches, such as online presence and in-store experiences, can help local retailers thrive alongside e-commerce.
- **Financial Literacy Education:** Educational institutions can offer financial literacy programs to help students make informed decisions about online shopping and budgeting. These programs can empower students to manage their finances responsibly.
- **Digital Skills Training:** As digital skills play a crucial role, universities and colleges can integrate digital literacy courses into their curriculum. This equips students with the skills needed to navigate the online marketplace effectively.
- **Stress Management Resources:** Recognizing that online shopping can serve as a stress relief mechanism, institutions can provide stress management resources and counseling services to help students cope with academic pressures in healthier ways.
- **Local Economic Impact Assessment:** Further research can be conducted to assess the specific impact of students' online shopping behaviors on the local economy. This can help policymakers and businesses develop strategies to mitigate negative consequences and capitalize on opportunities.
- **Continuous Research:** As online shopping trends evolve rapidly, ongoing research and surveys can keep educational institutions and businesses informed about shifting preferences and behaviors among students.

By implementing these suggestions and staying attuned to the evolving landscape of online shopping, stakeholders can better support students in their online shopping habits while addressing their unique needs and concerns.

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