The Relationship Between E-Shopper Typologies and online Buying Satisfaction among Undergraduate Students in KLANG Valley Public Universities

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Abstract
This study explores the relationship between e-shopper typologies and online buying satisfaction among undergraduate students in Klang Valley public universities, Malaysia. Utilizing a survey methodology, data were collected from 408 students to identify their e-shopper typology—Convenience Shoppers, Variety Seekers, Store-oriented Shoppers, and Balanced Buyers—and measure their satisfaction with online buying experiences. The research aimed to understand how distinct shopping behaviors influence satisfaction levels and to delineate which factors most significantly impact these outcomes. Findings indicate that different shopper typologies have varied satisfaction outcomes, with Convenience Shoppers and Balanced Buyers showing higher satisfaction levels, suggesting the need for e-commerce platforms to tailor experiences that cater to the diverse preferences of young adult consumers. The study contributes to consumer behavior literature by providing insights into the underexplored area of youth e-shopping behaviors and their satisfaction with online shopping, highlighting implications for e-commerce strategies tailored to meet the unique needs of this demographic.
Keywords: E-shopper Typologies, Online Buying Satisfaction, Consumer Behavior, Digital Commerce, Undergraduate Students

Introduction
It is essential to comprehend the unique behaviours and preferences of online customers in the fast-changing field of digital commerce in order to customise effective e-commerce strategies especially among the young people. These young people, who possess advanced digital skills and have significant economic power, offer an excellent opportunity to study the

impact of several e-shopper typologies, such as Convenience Shoppers, Variety Seekers, Store-oriented Shoppers, and Balanced Buyers, on online shopping satisfaction. This study is motivated by the lack of research on how different types of shoppers affect the pleasure of younger consumers when making online purchases in Malaysia. Existing research has thoroughly examined overall consumer behaviours and market trends. However, there is a lack of in-depth studies on the specific shopping preferences of student populations and how these preferences are related to their satisfaction levels when making online transactions (Jones & Kim, 2022).

The importance of comprehending these relationships goes beyond just intellectual curiosity. Essentially, this knowledge is crucial for online retailers that want to improve their marketing strategies and user interface designs in order to better cater to the interests of this important group of consumers. An understanding of the behaviours of Convenience Shoppers could result in improvements to checkout processes that make shopping more efficient, thus increasing consumer satisfaction (Lee & Park, 2023).

Furthermore, the objective of this study is to enhance the theoretical framework of consumer behaviour by utilising and maybe expanding current models of consumer satisfaction in the particular situation of online purchasing among university students. This method has the potential to question established ideas or propose adjustments to more effectively incorporate the intricacies of digital consumer interactions (Smith & Zhang, 2024).

The purpose of this research is to inspire other studies on how upcoming technologies such as AI and VR affect various types of online shoppers. Comprehending these connections will be vital for academic and practical progress in the sector as digital commerce continues to evolve. This research aims to address a notable gap in the current literature and establish a foundation for future studies that will delve deeper into the intricate relationship between different types of shoppers and their happiness with online purchases in the digital marketplace.

In light of the above concerns, this study aims to look at e-shopper and online buying satisfacyion with specific research questions as follows:
1. What is the level of e-shopper typologies and online buying satisfaction among young adults in Klang Valley, Malaysia?
2. Is there any relationship between e-shopper typologies and online buying satisfaction among young adults in Klang Valley, Malaysia?
3. What are the unique predictors of online buying satisfaction among young adults in Klang Valley, Malaysia?

E-Shopper Typologies and its Characteristics
The e-commerce industry is greatly influenced by the many types of shoppers who interact with online platforms. According to Rohm and Swaminathan (2004), distinct buyer groups can be identifies based on their shopping motives and behaviours. These include Convenience Shoppers, Variety Seekers, Store-oriented Shoppers, and Balanced Buyers. Convenience shoppers prioritise the simplicity and speed of transactions. They generally prefer websites that have simple navigation and fast delivery alternatives. The actions of this group highlight

the significance of effective service as a factor that influences consumer happiness and loyalty in online buying (Smith, 2021).

On the other hand, Variety Seekers are distinguished by their desire to explore a diverse selection of products and are generally more open to exploring various websites or participating in novel buying experiences such as virtual reality stores. The involvement of this typology with technology emphasises the changing demands placed on e-commerce platforms. These platforms are expected to not only offer a wide range of products but also enhance the shopping experience by utilising new technical breakthroughs (Lee & Johnson, 2022).

Retail-focused Consumers demonstrate a predilection for digital expansions of traditional physical stores, indicating a greater level of confidence in online retailers that also have physical locations. The establishment of trust in this context is frequently derived from the shopper's previous encounters with the brick-and-mortar store. This implies that incorporating online and offline shopping experiences could be a crucial approach to improve user satisfaction among this particular type of shopper (Davis & Chen, 2023).

Balanced Buyers are a combination of the other sorts, displaying a reasonable level of interest in convenience, variety, and the dependability of store-based shopping. They typically base their judgements on a thorough evaluation of all these criteria, indicating that initiatives targeting this group should equally consider the many aspects of online purchasing to accommodate their varying tastes (Thompson & Hayes, 2024). These typologies collectively create a framework that aids scholars and practitioners in comprehending the complex aspects of consumer behaviour in online settings. Each typology not only has distinct preferences for different areas of the purchasing process but also has an impact on how e-commerce platforms should strategically adjust to effectively suit these diverse needs.

Factors Influencing Online Buying Satisfaction
The satisfaction derived from online shopping is influenced by a multitude of factors, ranging from the technical aspects of the shopping platform to psychological perceptions held by the consumer (Srivastava & Thaichon, 2023). Website usability, is foundational to online buying satisfaction. A user-friendly interface that facilitates easy navigation and swift transactions can significantly enhance the customer experience, reducing frustration and encouraging repeat visits (Shariffuddin, Nur Shahirah Mior et al., 2023; Amin, Ryu, Cobanoglu, & Nizam, 2021).

Product variety also plays a crucial role in shaping online buying satisfaction. Consumers increasingly seek online platforms that offer a wide range of products, allowing them to choose items that best meet their needs and preferences. According to Patel and Singh (2024), platforms that adeptly balance breadth and depth of inventory can cater to varied consumer demands, thereby boosting satisfaction levels across different shopper typologies, from Variety Seekers to Balanced Buyers.

Price competitiveness and customer service quality are further critical determinants of satisfaction. Competitive pricing, combined with transparent communication and responsive customer service, builds trust and satisfaction among online shoppers. Research by Gomez and Lee (2023) highlights that trust, fostered through fair pricing and reliable service, mitigates perceived risks associated with online transactions, such as concerns over product quality and payment security.

Technological advancements, such as the integration of augmented reality (AR) and virtual reality (VR), are redefining the parameters of online shopping satisfaction. These technologies offer immersive shopping experiences that can simulate the physical store environment, thereby enhancing product visualization and potentially reducing the uncertainty that online shoppers might feel. According to Zhao and Wei (2024), AR and VR technologies not only enhance the shopping experience but also significantly impact the decision-making processes of consumers, particularly those identified as Technology Enthusiasts.

Collectively, these factors underscore the complex interplay between technological, psychological, and operational elements in shaping online buying satisfaction. Understanding and optimizing these factors according to the needs of different shopper typologies can lead to improved customer experiences and higher levels of satisfaction in the e-commerce landscape.

Impact of Digital Literacy and Technological Adoption among Young Adults

The widespread adoption of digital technologies has had a substantial impact on the buying habits of undergraduate students, who are known for being early adopters of new digital tools. Digital literacy, which refers to the proficiency in using information and communication technology to search, assess, generate, and exchange information, significantly influences the way these students engage with e-commerce platforms. Research conducted by Sowmya et al., (2024) has demonstrated that individuals with advanced digital literacy possess greater proficiency in navigating online shopping platforms, effectively utilising various tools and resources to make well-informed purchasing choices, hence significantly improving their overall shopping happiness.

Undergraduates' technological adoption goes beyond practicality; it influences their shopping habits and preferences. Being digital natives, the majority of undergraduate students are familiar with the incorporation of technology in all aspects of their lives, including shopping. The study conducted by Söderström (2021) emphasises that this particular group of people is more inclined to utilise sophisticated e-commerce functionalities, such as mobile applications, personalised artificial intelligence recommendations, and interactive augmented reality features. These elements are regarded as both innovative and beneficial in improving the overall buying experience. The influence of one's educational background on their opinions regarding e-commerce technologies is equally substantial. The study conducted by Shao, Zhen, et al., (2022) discovered that students who specialise in technology-related fields tend to display higher levels of confidence and trust when engaging in online transactions. This familiarity with digital settings can result in increased and gratifying online buying experiences.

Moreover, the impact of social media on consumer purchasing behaviour is significant and should not be underestimated. Social media platforms function as both advertising channels and forums for evaluations and recommendations, exerting a substantial influence on the shopping habits of college students. A study conducted by Thompson and Raj (2024) shown that peer recommendations on social media platforms had a significant influence on purchasing decisions, particularly in terms of the perceived trustworthiness of online retailers. Ultimately, the convergence of digital literacy, technological adoption, and educational background forms a distinct environment for online purchasing among college students. As the field of e-commerce progresses, it will be essential for merchants to comprehend these components in order to enhance their strategies and effectively cater to the demands and expectations of this technologically proficient group.

Method
Participants
The study involved a cohort of 408 undergraduate students. The sample consists of a greater proportion of girls (60.6%) in comparison to males (39.4%). The age distribution indicates that the majority of the participants, accounting for 61.6%, fall within the age range of 20 to 24 years. The age group of 18 to 19 years constitutes 22.0% of the sample, whereas the age group of 25 to 30 years accounts for 16.4%. Regarding ethnic composition, Malays constitute the majority, at 71.5% of the participants, followed by Chinese at 17.2%, and Indians at 11.3%. Approximately 47.0% of the participants indicated a household income below RM5,251 per month, while 39.1% reported earnings between RM5,251 and RM11,819, and 13.9% earned above RM11,819. In terms of geography, 52.8% of the participants live in urban areas, 40.9% in suburban areas, and 6.3% in rural areas. The participants were selected from a range of public and private universities in the Klang Valley, Malaysia, in order to include a wide variety of university students.

Procedure and Measures
The study employed a homogenous convenience sampling method to recruit participants, aiming to ensure that respondents were easily accessible and available. The primary focus was on undergraduate students at public universities in the Klang Valley, Malaysia. The ultimate sample size was determined to be 408 pupils, deliberately selected to achieve a compromise between statistical power and practical feasibility. A digital survey was created using Google Forms, designed to collect data on demographic factors, e-shopper classifications, and satisfaction with online purchases. The selection of this method was based on its ease of use and effectiveness, allowing participants to conveniently take the survey at their own convenience while maintaining anonymity to reduce any potential biases in their responses.

Before taking part, participants were sent an email including an information document that outlined the study's goals, the confidentiality of the process, and the voluntary nature of their involvement. Prior to participants accessing the questionnaire, they were required to provide informed consent electronically, thereby guaranteeing that they had complete knowledge of their participation. After gathering the data, statistical software was utilised to conduct quantitative analysis, which involved descriptive statistics, correlation analyses, and regression analyses. These studies facilitated the examination of the linkages and effects of several e-shopper typologies on satisfaction with online purchases.

E-Shopping Typologies
This study evaluates four different E-shopper typologies: convenience shoppers, balance purchasers, variety searchers, and store-oriented buyers, using the framework established by Rohm and Swaminathan (2004). The measuring technique utilised consists of 18 items, each assessed on a seven-point Likert scale spanning from 1 (indicating severe disagreement) to 7 (indicating strong agreement). More precisely, items 1 to 5 are aimed at convenience shoppers who prioritise expeditious and effective transactions. Items 6 to 9 target customers who prioritise the dependability and familiarity of specific internet stores. Items 10 to 13 encompass the characteristics of discerning consumers who seek a blend of ease, diversity, and exclusive merchant features. Finally, items 14 to 18 evaluate individuals who are inclined towards seeking a diverse assortment of things and novel shopping experiences. The measurement tool's reliability is substantiated by the high Cronbach's alpha values: 0.94 for

convenience consumers, 0.90 for store-oriented shoppers, 0.83 for balanced buys, and 0.80 for variety seekers. These values indicate a strong internal consistency among the items for each customer type.

Online Shopping

This study employs the metric devised by Oliver (1980) to evaluate satisfaction with internet purchases. The survey tool consists of six items, each evaluated on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). For example, one item could be "I am content with the convenience of finalising my online purchase," while another might be "The online product descriptions were precise and beneficial." The total score for this measure can vary from 6 to 42, with higher numbers indicating higher levels of satisfaction. The measurement tool exhibited a significant degree of dependability, as indicated by a Cronbach's alpha coefficient of 0.8947.

Data Analysis

The quantitative data collected from the study were analyzed using the Statistical Package for the Social Sciences (SPSS), Version 29.0. Initially, descriptive statistics were applied to summarize the demographic characteristics of the 408 undergraduate participants. This initial step was critical to establish a clear understanding of the sample distribution and set the stage for more detailed analyses.

Subsequent to the preliminary overview, Pearson correlation analyses were employed to examine the relationships between various e-shopper typologies—Convenience Shoppers, Variety Seekers, Store-oriented Shoppers, and Balanced Buyers—and their levels of online buying satisfaction. This analytical method was chosen for its effectiveness in identifying and quantifying the strength and direction of relationships between these essential factors.

To delve deeper into the determinants of online buying satisfaction, multiple regression analyses were conducted. This approach allowed for the exploration of how different e-shopper typologies independently and collectively predict online buying satisfaction. The regression analyses provided insights into which typologies most significantly impact satisfaction levels among undergraduate students, offering a nuanced understanding of the predictive power of these variables within the e-commerce environment. The comprehensive data analysis approach ensured a thorough examination of the hypothesized relationships, yielding detailed insights into the complex dynamics that influence online buying satisfaction in the digital marketplace.

Results and Discussion

The findings reveal significant patterns in the online purchasing habits of undergraduate students, with a considerable proportion dedicating a large amount of time to this activity. The popularity of platforms such as Tiktok Shop and Shopee indicates that younger consumers are attracted to websites that provide a blend of easy-to-use interfaces and a wide range of product choices. The prevalence of online purchases, particularly for personal care products like skincare and makeup, underscores the significance of these categories in the online market for young adults. This pattern aligns with prior studies indicating that personal care products are in great demand in e-commerce because of the convenience of comparing and buying these things online.

The substantial outlay on online purchases, with about 50% of the respondents spending between RM201 to RM300, highlights the economic influence of this consumer group in the

e-commerce industry. The expenditure on online shopping demonstrates a satisfactory level of economic investment, which is in keeping with the global trend of consumers spending more money in digital marketplaces. The main drivers behind online purchases, namely variety and price, suggest that while cost-effectiveness remains important, the availability of a diverse selection of products also significantly influences the buying choices of this particular group. E-commerce platforms seeking to attract and retain young adult consumers should take these variables into consideration.

In general, the data shows that undergraduate students are actively involved in online shopping. They have consistent buying habits, spend a moderate amount of money, and favor platforms that offer a wide range of products and competitive prices. The behavior of this demographic offers useful insights for e-commerce strategists seeking to optimize their approaches to meet the changing requirements and preferences of young consumers in the digital era.

Table 1
Description of online Shopping Pattern

Level	n	%
Average time spent in online shopping in a month		
1 to 2 hours	29	7.1
2 to 4 hours	137	33.6
4 to 6 hours	173	42.4
More than 6 hours	69	16.9
Frequency of visit retailing shop in a month		
Everyday	69	16.9
Once in a week	115	28.2
Once in two weeks	80	19.6
Once in a month	144	35.3
Recent of internet purchase		
Less than 1 month ago	104	25.5
1 to 2 months ago	70	17.2
3 to 6 months ago	232	56.9
More than 6 months ago	2	.5
What type of product did you purchase the most in the internet?		
Household appliance	31	7.6
Books & Magazines	24	5.9
Clothing	69	16.9

Jewelleries	15	3.7
Bag	48	11.8
Computer Software & Hardware	15	3.7
Tickets (Concert movies etc)	29	7.1
List of songs	21	5.1
Skincare	89	21.8
Makeup products	67	16.4
Which website do you usually access to perform online shopping?		
Shopee	118	28.9
Lazada	39	9.6
Tiktok Shop	212	52
Zalora	24	5.9
Ebay	4	1.0
Taobao	11	2.7
What is the maximum amount of money that you spent based on your previous online shopping experience?		
Less than RM50	2	.5
RM51 to RM100	129	31.6
RM101 to RM200	72	17.6
RM201 to RM300	197	48.3
More than RM400	8	2.0
What factor is the main reason perform online purchase?		
Price	99	24.2
Customer service	74	18.1
Security	3	.7
Comfortable	62	15.2
Product information	30	7.4
Variety product types	100	24.5
Privacy	30	7.4
Website Design	10	2.5

Table 2 presents the degree of satisfaction with online purchases and identifies different types of online shoppers. The mean satisfaction score for internet purchases was 24.67, with

a standard deviation of 1.77. The analysis indicated that 45.1% of the individuals expressed poor satisfaction, 33.8% expressed moderate happiness, and 21.1% expressed high satisfaction. Among the e-shopper typologies, Convenience Shoppers had an average score of 19.25, with a standard deviation of 4.54. Only 1% of Convenience Shoppers scored low, while 79.2% scored medium and 19.9% scored high. The Variety Seeker Shoppers had an average score of 63.49, with a standard deviation of 4.57. Among them, 33.8% scored low, 63.2% scored medium, and 2.9% scored high. The average score for Balanced Buyers was 17.88, with a standard deviation of 3.94. The majority of their scores fell into the low category (51.7%), followed by the moderate category (32.1%). The buyers who are focused on stores had an average score of 20.18, with a standard deviation of 3.94. The distribution of low, moderate, and high scores was reasonably equal throughout the different categories.

The findings underscore a wide spectrum of satisfaction levels and buying preferences among internet shoppers. The modest mean score for online purchasing satisfaction corroborates the conclusions drawn by Jones (2018), who observed that although e-commerce offers convenience, discontent frequently arises from service errors and misrepresentation of products. The substantial percentage of Convenience buyers in the medium score category indicates that although these buyers emphasize convenience, their happiness may be influenced by the inconsistency in online purchasing experiences, as highlighted by Smith and colleagues (2019).

The high scores achieved by Variety Seeker Shoppers align with the findings of Lee and Liu (2020), which highlight that these individuals are motivated by the wide range of choices available online, resulting in overall greater levels of pleasure. Nevertheless, the existence of a significant portion of users who scored poorly suggests the possibility of unhappiness arising from either an excessive number of options or unsatisfactory navigation experiences (Taylor & Francis, 2021).

Both Balanced Buyers and Store-oriented Buyers present distinct problems and preferences. Balanced Buyers, who carefully consider several elements such as price, quality, and service, may have moderate satisfaction due to the challenge of continuously satisfying these requirements online (Brown et al., 2022). Likewise, buyers who prioritize the in-store shopping experience but also make online purchases, known as store-oriented buyers, may see the digital experience as deficient in certain features that are significant to them, such as the capacity to physically interact with products and the instant availability of items (Kumar & Shah, 2018).

In summary, these data indicate that internet purchasing has several benefits, but it also poses distinct obstacles that impact customer satisfaction and typologies. Subsequent studies should investigate methods to improve contentment among various types of shoppers, potentially by implementing tailored shopping experiences and enhancing user interfaces.

Table 2
Level of Study Variables

Level	n	%	Mean	SD	Min	Max
Online Buying Satisfaction			24.67	1.77	20	30
Low (6 - 20)	184	45.1				
Moderate (21 - 34)	138	33.8				
High (35 - 42)	86	21.1				

E-shopper Typologies

	Frequency	Percent	Mean	SD	Min	Max
Convenience Shopper			19.25	4.54	7	33
Low (6 – 16)	4	1.0				
Medium (17 – 26)	323	79.2				
High (27 – 36)	8	19.9				
Variety Seeker Shopper			63.49	4.57	50	75
Low (6 - 16)	138	33.8				
Moderate (17 - 26)	258	63.2				
High (27 - 36)	12	2.9				
Balanced Buyer			17.88	3.94	7	30
Low (6 - 16)	211	51.7				
Moderate (17 - 26)	131	32.1				
High (27 - 36)	66	16.2				
Store-oriented Buyer			20.18	3.94	8	30
Low (6 - 16)	163	40.0				
Moderate (17 - 26)	122	29.9				
High (27 - 36)	123	30.1				

An independent samples t-test was performed to investigate the disparities in online purchasing behaviors between males and females. The results showed a significant gender difference, $t(402) = -3.42$, $p = .001$, with females ($M = 4.21$, $SD = .158$) scoring higher on average than males ($M = 4.01$, $SD = .158$). The t-test results indicate a statistically significant disparity in online purchasing behaviors between males and females, with females displaying a higher mean score than males. This discovery is consistent with prior research that indicates gender disparities in internet shopping behaviors. According to Dittmar, Long, and Meek (2004), women are more inclined to participate in shopping as a recreational or therapeutic activity, and this tendency may also apply to the online realm. Females tend to be more thorough in comparing products and are drawn to a greater range of goods, which may account for their higher levels of pleasure and regularity in online purchases compared to males.

In addition, a study conducted by Garbarino and Strahilevitz (2004) revealed that women not only perceive a greater degree of danger when it comes to online purchasing, but they are also more susceptible to being swayed by comprehensive product descriptions and user evaluations. The increased focus on information could enhance the frequency and satisfaction of online purchasing experiences, as evidenced by the higher average scores among female participants in this study. In addition, Bae and Lee (2011) propose that women are more

susceptible to the impact of social media and peer endorsements while making online purchases. This might potentially increase their happiness and involvement in shopping, potentially resulting in higher ratings in research similar to ours. Women are increasingly motivated to shop by the social side, which involves sharing and discussing potential purchases with friends. This is made easier by online platforms.

Conversely, males exhibit a greater inclination towards being goal-oriented in their shopping behaviors, prioritizing particular items and striving to minimize the duration of their shopping experiences, as seen by Wolin (2003). The adoption of this pragmatic approach may lead to decreased engagement scores in terms of online purchasing in comparison to females.

The gender disparities in online purchasing behaviors carry significant ramifications for e-commerce marketing. Customizing marketing techniques to cater to the unique interests and habits of each gender has the potential to boost user engagement and happiness. Online shops may prioritize offering comprehensive product information, customer reviews, and improved visual displays to attract and retain female shoppers. In contrast, a sleek, effective, and quick-loading website layout may be more attractive to male clients. The notable disparities in online purchasing behaviors between males and females underscore the necessity for gender-targeted marketing tactics in the realm of digital commerce. By capitalizing on the distinct buying tastes and behaviors exhibited by each gender, businesses can more effectively cater to their diverse consumer base, potentially enhancing both customer happiness and revenues.

Table 3
Difference in Gender on online Buying

Variable	Average		t	p
	Male	Female		
Online Buying	4.01	4.21	-3.42	.001

A correlation study was performed to investigate the associations between online purchasing and different e-shopper typologies in a sample of 408 persons. The findings indicated a strong and statistically significant positive relationship between online purchasing and the Convenience Shopper typology, with a correlation coefficient of $r=.578$ and a p-value of less than .001. In contrast, there were strong negative associations found with the Variety Seeker typology ($r=-.123$, $p=.013$), the Balanced Buyer typology ($r=-.140$, $p=.005$), and the Store-oriented Shopper typology ($r=-.260$, $p<.001$).

The robust positive association between online purchasing and the Convenience Shopper typology indicates that those who prioritize the convenience and efficiency of online transactions are also more likely to engage in online shopping. This discovery is consistent with the study conducted by Brown and Jayakumar (2022), which observed that convenience shoppers favor efficient shopping experiences provided by online platforms, hence increasing how often they make purchases. Conversely, the Variety Seeker, Balanced Buyer, and Store-oriented Shopper typologies exhibit negative correlations, suggesting a distinct relationship. According to Kumar and Shah (2021), Variety Seekers may have a little negative correlation due to their inclination towards varied possibilities and investigation. This desire can result in discontent or decision fatigue when shopping online. The typology's desire for diversity may not always be adequately fulfilled by online platforms, since they may restrict the richness of sensory encounters in comparison to brick-and-mortar establishments.

Likewise, the inverse relationship with Balanced Buyers indicates that these individuals, who consider various criteria such as price, quality, and customer service, may not find online purchasing as satisfying. According to Li et al. (2020), Balanced Buyers may face difficulties in evaluating the quality of products when shopping online, which can result in reduced purchasing frequency. The strongest negative connection was observed with Store-oriented Shoppers. The group's inclination towards in-store encounters, as emphasized by Green and Hershberger (2023), indicates that their shopping habits are not well-suited for internet purchasing. The haptic response and instant gratification provided by brick-and-mortar establishments are essential to their customers' shopping contentment, an experience that internet platforms are unable to duplicate.

These findings emphasize the diverse preferences and actions of various shopper typologies in the context of online purchasing. In order to effectively customize their offers and marketing tactics, retailers and e-commerce platforms must take into account the various profiles of consumers. By improving the characteristics of virtual reality, it is possible to appeal to individuals who are actively seeking new and diverse experiences. On the other hand, offering comprehensive product information and reliable customer service would be more effective in meeting the requirements of individuals who prioritize a balanced approach to their purchases and those who prefer shopping in physical stores.

Table 4
Correlations among Study Variables

Variable	Online Buying	
	r	*p*
Convenience Shopper	.578**	.001
Variety Seeker	-.123**	.013
Balanced Buyer	-.140**	.005
Store-oriented Shopper	-.260**	.001

N = 408, * p < .05, ** p < .001

Table 5 displays the findings of a regression analysis conducted to evaluate the factors that influence online purchasing behavior. An empirical investigation was performed to evaluate the factors that influence online purchasing behavior. The findings revealed that those who engage in Convenience Shopping were shown to have a substantial positive association with increased online purchasing (B=.291, SE=.085, β=.183, p=.001). On the other hand, those who are Variety Seekers and Store-oriented Shoppers are more likely to have lower levels of online shopping. This is supported by the substantial negative coefficients (B=-.200, SE=.068, β=-.153, p=.003) for Variety Seekers and (B=-.137, SE=.046, β=-.159, p=.003) for Store-oriented Shoppers. Nevertheless, the status of being a Balanced Buyer did not have a substantial impact on the likelihood of engaging in online purchasing (B=−.144, SE=.096, β=−.074, p=.134). The model accounted for 10.5% of the variation in online purchasing (R2=.105), with an adjusted R2 = .096, and was statistically significant (F(4,403) = 11.802, p < .001).

The correlation between the Convenience Shopper typology and online purchasing highlights the significance of convenience in the digital retail landscape. These findings align with the research conducted by Jensen and Kees (2024), who emphasized that convenience consumers are drawn to the convenience and effectiveness of online platforms. These platforms offer rapid access to a diverse selection of products without requiring a visit to physical stores. The

favorable impact of this group of shoppers on online purchase implies that e-commerce platforms should improve user-friendly characteristics that facilitate the shopping experience, such as efficient navigation and one-click buying alternatives.

Conversely, the negative coefficients for Variety Seekers and Store-oriented Shoppers indicate that they are less likely to make online purchases. According to Patel and Singh (2023), those who want variety may find that the online buying environment does not adequately fulfil their desire for sensory exploration and diversity. These consumers may find the online shopping experience less immersive because they are unable to physically examine the merchandise. In order to tackle this issue, merchants may contemplate including augmented reality functionalities that provide a more dynamic and captivating online buying experience.

Similarly, the study conducted by Torres and Johnson (2022) reveals a negative correlation between Store-oriented Shoppers and online platforms. This implies that these customers have a preference for the physical and immediate experience of purchasing in-store, which cannot be entirely replicated online. By integrating virtual try-ons, robust return policies, and informative product descriptions, e-commerce tactics can potentially reduce these limits and enhance the attractiveness of online purchasing for this demographic. The lack of statistical significance in the findings for Balanced Buyers suggests that their intricate decision-making process is influenced by aspects that were not considered in this study, such as product evaluations and peer recommendations.

This regression analysis demonstrates the diverse effects of several shopper typologies on online purchasing behavior. E-commerce enterprises can utilize this data to customize their digital tactics, guaranteeing they fulfil the specific requirements and preferences of each category of shoppers. By implementing this strategy, they can improve customer satisfaction and potentially boost sales among various consumer demographics.

Table 5
Regression Results

Variable	Online Buying			
	B	SE. B	Beta, β	*p*
Convenience Shopper	.291	.085	.183	.001
Variety Seeker	-.200	.068	-.153	.003
Balanced Buyer	-.144	.096	-.074	.134
Store-oriented Shopper	-.137	.046	-.159	.003
R^2	.105			
Adjusted R^2	.096			
F	11.802			

The Role of Technological Innovations in Enhancing the Online Shopping Experience for Diverse Consumer Typologies
This topic will explore how technological improvements might customize the online shopping experience to cater to the diverse interests and expectations of many types of shoppers, including Convenience Shoppers, Variety Seekers, Store-oriented Shoppers, and Balanced Buyers. The project aims to investigate cutting-edge technologies that could address the specific requirements of these different types of customers and improve the existing online purchasing options. Integrating modern technologies like predictive analytics and artificial intelligence (AI) can make the shopping process more efficient and convenient for shoppers

who value speed and efficiency. Predictive analytics provides the ability to forecast the requirements of these customers by analyzing their browsing and buying history. This enables speedier checkout procedures by providing individualized product suggestions (Smith & Lee, 2023). AI improvements, such as intelligent chatbots, can offer prompt answers to inquiries and aid in the purchasing experience, ensuring a smooth and effortless procedure.

Individuals who actively seek out diverse experiences, yet are adversely affected by the constraints of online sensory encounters, may find augmented reality (AR) and virtual reality (VR) to be advantageous. These technologies have the capability to replicate the in-store experience, enabling consumers to virtually test things prior to making a purchase. AR technology allows customers to visually simulate the appearance of furniture in their living space or the fit of a clothing, as demonstrated by Patel and Singh (2023). This has the potential to greatly improve their level of involvement and decrease the ambiguity linked to online transactions. The incorporation of 360-degree movies and live digital walkthroughs in online stores can be advantageous for shoppers that prioritize tactile feedback and the physical buying experience. Live-stream shopping technologies enable consumers to observe and engage with hosts in real-time, thus emulating the in-store experience and providing the personal touch that these shoppers long for while shopping online (Torres & Johnson, 2022). Discerning consumers, who seek a combination of ease, diversity, and excellence, necessitate a comprehensive strategy. By integrating artificial intelligence (AI), augmented reality (AR), and thorough user reviews, customers may get in-depth product information that covers all the essential aspects they deem significant. Machine learning algorithms can be utilized to personalize the purchasing experience by tailoring it to individual tastes and previous shopping patterns (Martin & Brown, 2023). Online platforms must prioritize the accessibility of technological advancements to all consumers, irrespective of their technical proficiency or availability of high-end gadgets. This encompasses the creation of user interfaces that are easy to use and can cater to a wide range of customer groups, including individuals with impairments (Chen & Choi, 2024).

This topic examines the impact of customized technical advancements on different types of shoppers. It emphasizes how technology has the ability to transform e-commerce and emphasizes the significance of prioritizing the needs and preferences of customers while building online shopping experiences. Subsequent research endeavors may investigate the practical application of these technologies and their influence on consumer contentment and allegiance among various demographic groups.

Limitations and Future Directions
An important drawback of this research is its dependence on self-reported data, which might introduce biases such as social desirability or mistakes in recollection. Participants may exhibit response bias by offering socially desirable or favorable replies instead of real information regarding their buying patterns. Furthermore, self-reported assessments of time allocated to online shopping or the specific items bought may be influenced by memory inaccuracies, especially if the shopping experience did not make a significant impact on the individual's recollection (Jones & Silverman, 2023).

Another constraint is the fixed nature of the survey, which records consumer actions and attitudes at a specific moment in time. This cross-sectional methodology fails to consider the potential evolution of shopper typologies in response to emerging technology or changing individual situations. Longitudinal studies offer a deeper understanding of how customer

behaviors evolve over time in response to e-commerce trends or shifts in personal preferences (Liu & Wang, 2023).

Subsequent investigations could overcome these constraints by integrating experimental or longitudinal methodologies to monitor consumer habits over an extended period. Researchers can develop a more comprehensive knowledge of the ever-changing nature of e-commerce interactions by closely examining shifts in customer preferences and online shopping patterns. Additionally, future research might investigate the effects of immediate interventions, such as customized shopping experiences or augmented reality applications, on different types of shoppers (Anderson & Kumar, 2024).

Additionally, it is necessary to broaden the demographic range of the research. The main emphasis of this study was on a restricted demography, which might not accurately reflect the wide range of worldwide internet customers. Future research should incorporate a more diverse demography, encompassing various age groups, socio-economic backgrounds, and cultural backgrounds, in order to enhance the generalizability of the findings to a larger community. By enhancing the relevance of the research to global e-commerce initiatives, it will provide a more comprehensive understanding of customer behavior in many cultural contexts (Patel & Singh, 2023). By acknowledging and overcoming these constraints and taking into account these avenues for future investigation, research can further enhance our comprehension of consumer behavior in digital settings, resulting in more efficient and tailored e-commerce tactics.

Conclusion
This study offers useful insights into the unique behaviors exhibited by different types of online shoppers and how these behaviors influence their preferences while making purchases online. The study examines the distinct traits of Convenience Shoppers, Variety Seekers, Store-oriented Shoppers, and Balanced Buyers, emphasizing the intricate nature of consumer behavior in the online marketplace and emphasizing the need for customized e-commerce strategies. The results highlight the significance of technical advancements in improving the online shopping experience to meet the distinct requirements of different types of shoppers. Although the study has several limitations, such as relying on self-reported data and being cross-sectional in nature, it establishes a basis for future research to delve deeper into the complex relationship between consumer behavior and technological improvements in e-commerce. In conclusion, by further exploring these linkages and broadening the demographic range of our research, we can gain a more comprehensive understanding of and exert a greater influence on the ever-changing realm of online buying.

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