Decoding Demographics on Generation Z's Post-Pandemic Shopping Trends: E-Commerce Evolution 4.0, the Digital Shopper's Dilemma, and Tailoring Strategies

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Abstract
This quantitative study investigates the impact of demographic factors on customer satisfaction and subsequent online purchase intentions among Generation Z university students in Dhaka, Bangladesh, during the post-COVID-19 era. Employing a cross-sectional research design, the study uses a stratified random sampling technique to collect data from 433 respondents. The questionnaire, based on a five-point Likert scale, explores variables such as gender, internet literacy, product price perception, income, education, customer satisfaction, and intention to purchase. IBM SPSS Version 25 (Licensed) is used for data analysis, incorporating descriptive statistics, correlation analysis, and regression analysis. The study unveils positive and significant relationships between gender, internet literacy, product price, income, and education with customer satisfaction. Moreover, a robust link between customer satisfaction and the intention to purchase online is identified. Theoretical frameworks such as Social Identity Theory and Consumer Satisfaction Models guide the research, highlighting the importance of a nuanced understanding for tailored marketing strategies. The findings contribute valuable insights for businesses and policymakers navigating the post-COVID-19 digital landscape. Future research avenues include exploring emerging technologies and cross-cultural variations within Generation Z.

Keywords: Generation Z, Online Shopping, Customer Satisfaction, Demographic Factors, Post-Covid-19, Digital Consumer Behavior
1. Introduction

The global landscape of commerce has undergone a transformative shift, especially in the wake of the COVID-19 pandemic, with Generation Z emerging as a pivotal force shaping the dynamics of online purchasing behavior (Nguyen Thi et al., 2022; Polas et al., 2022a; Dimitrova & Ilieva, 2023). As society adapted to unprecedented challenges and restrictions imposed by the pandemic, the reliance on e-commerce skyrocketed, fundamentally altering how consumers interact with and navigate the marketplace. This research delves into the effects of customer demographic factors on the satisfaction levels of Generation Z consumers, elucidating the crucial linkages between gender, internet literacy, product price, income, education, and their resultant impact on online purchase intentions post COVID-19 era (Afrin et al., 2020; Suryadi et al., 2021).

The COVID-19 pandemic triggered a paradigm shift in consumer behavior, prompting a surge in online transactions as individuals sought safe and convenient alternatives to traditional brick-and-mortar shopping (Wu et al., 2022; Jahanshahi et al., 2023). Generation Z, born into the digital age, found itself at the forefront of this shift, relying on the digital marketplace as a source of goods and an avenue for social interaction and engagement. The unprecedented circumstances compelled even those resistant to online shopping to explore and embrace digital platforms, redefining the consumer experience (Zhang et al., 2022; Polas et al., 2022b).

This study aims to unravel the nuances of Generation Z's online purchasing behavior during the post-COVID-19 era, focusing on key demographic factors influencing their satisfaction levels and subsequent intention to purchase. By understanding these dynamics, businesses, and policymakers can adapt strategies to meet the evolving needs of this tech-savvy generation, contributing to the resilience and sustainability of e-commerce in the post-pandemic landscape.

The study's primary objectives were to unravel the relationships between demographic factors and customer satisfaction and discern how customer satisfaction influences the intention to purchase among Generation Z in the post-COVID-19 landscape. The study aimed to address the following research questions:

2. What is the nature of the relationship between customer satisfaction and intention to purchase online among Generation Z in the post-COVID-19 scenario?
This study was guided by several theoretical frameworks, with the Social Identity Theory and Consumer Satisfaction Models playing pivotal roles. Social Identity Theory, posited by Turner and Oakes (1986), was instrumental in understanding how demographic factors such as gender, income, and education contribute to the construction of identity, influencing preferences and satisfaction criteria. Consumer Satisfaction Models, drawing from literature by Oliver (1980) and Anderson and Sullivan (1993), provided a lens through which to explore the complex interplay between customer satisfaction and intention to purchase. Applied to our study, customer satisfaction becomes a crucial determinant influencing Generation Z's intention to continue engaging in online purchases (Polas et al., 2018a).

This study is structured to provide a comprehensive analysis of the identified relationships. The subsequent sections include a literature review to contextualize our study within existing research, followed by a detailed methodology outlining our research design and data analysis approach. The results and discussion section will present the empirical findings, offering insights into the identified correlations. Finally, the conclusion will synthesize the key takeaways and implications for businesses and policymakers, contributing to the ongoing discourse on the evolving landscape of e-commerce post-COVID-19 era.

2. Literature Review

The intersection of customer demographic factors, satisfaction, and online purchase behavior has become a focal point for researchers, particularly within the unique context of Generation Z (Nguyen Thi et al., 2022). Born into a digitally immersive world, this generation navigates online spaces with a fluency that shapes their preferences and decisions. As the global landscape adapts to the aftermath of the COVID-19 pandemic, understanding how demographic factors influence the satisfaction and online purchase intentions of Generation Z is imperative for businesses and policymakers alike (Polas et al., 2018b; Dimitrova & Ilieva, 2023).

2.1 Gender and Customer Satisfaction

Understanding the influence of gender on customer satisfaction, particularly within the domain of online shopping among Generation Z, is a critical aspect of contemporary consumer research (Marinković et al., 2020). Generation Z, born into a world where digital interactions are ubiquitous, navigates online marketplaces with unique preferences shaped by their sociocultural context (Marín-García et al., 2022; Afshar et al., 2023). Research has consistently explored the role of gender in shaping consumer behavior. In the context of Generation Z, studies suggest that gender differences can manifest in online shopping preferences. For instance, female members of Generation Z exhibit a higher inclination toward online shopping for fashion items, driven by a desire for convenience and a wide variety of choices (Marín-García et al., 2022; Hawlader et al., 2022).

Several studies have explored the intricate relationship between gender and online shopping satisfaction (Kim et al., 2019; Marín-García et al., 2022). Within the broader literature, gender-based differences in consumer behavior have been acknowledged. Female members of Generation Z exhibit distinct preferences in online shopping, often place a higher value on factors such as convenience, aesthetics, and social interactions within digital platforms. In the context of customer
satisfaction, research suggests that gender differences can manifest in diverse ways (Marín-García et al., 2022; Mondal et al., 2023). Studies by Cha and Borchgrevink (2019) and Singh (2020) found that female consumers tend to express higher levels of satisfaction in online shopping experiences, emphasizing the significance of factors like user interface design, personalized recommendations, and a sense of community engagement. However, the relationship between gender and satisfaction is not without nuances. Scholars such as Hult et al. (2019) highlight the importance of considering individual variations within gender categories, as preferences and satisfaction drivers may differ significantly among diverse groups within Generation Z.

The theoretical underpinning for exploring the link between gender and customer satisfaction can be drawn from social and psychological perspectives. Social identity theory suggests that individuals derive a sense of self and belonging from their gender identity, influencing their preferences and satisfaction criteria in online shopping contexts (Marín-García et al., 2022). In the proposed hypothesis for this study, we posit that there is a positive and significant relationship between gender and customer satisfaction among Generation Z consumers in the online shopping domain (Cha & Borchgrevink, 2019; Hawlader et al., 2021; Sikder et al., 2023). This hypothesis builds on the existing literature, aiming to contribute empirical evidence to the nuanced understanding of how gender dynamics shape the satisfaction levels of Generation Z consumers, ultimately informing businesses and policymakers about tailored strategies for this specific demographic group in the evolving post-COVID-19 landscape (Hult et al., 2019). In doing so, it was hypothesized that,

**H1:** A positive and significant relationship exists between gender and customer satisfaction among Generation Z consumers in the online shopping domain.

### 2.1 Internet Literacy and Customer Satisfaction

In the dynamic landscape of online shopping, understanding the relationship between Internet literacy and customer satisfaction among Generation Z is pivotal for businesses and researchers alike (Rajasulochana, 2022; Polas et al., 2022c). Generation Z, born into a digitally connected world, engages with online marketplaces in ways distinct from previous generations, emphasizing the need to explore how their Internet literacy influences their satisfaction levels. Generation Z, often called digital natives, is characterized by high levels of internet literacy. Previous studies (Tandon et al., 2018; Indrayani et al., 2019) have indicated that higher internet literacy is associated with increased satisfaction in online shopping experiences. The ability to navigate digital interfaces seamlessly contributes to a positive customer experience.

A foundational study by Olasani (2019) underscores the importance of Internet literacy in shaping consumer behavior. The authors found a positive correlation between higher Internet literacy levels and enhanced satisfaction in online shopping experiences. This aligns with the notion that individuals proficient in navigating the digital realm are better equipped to utilize online platforms, leading to heightened satisfaction.

Further insights into the Generation Z demographic reveal nuanced patterns. Research by Al-Dmour et al. (2021) delves into the specific preferences of Generation Z consumers in relation to Internet literacy. The study indicates that those with advanced digital skills express greater satisfaction, emphasizing the role of Internet literacy as a determining factor in shaping their online satisfaction.
shopping experiences. Moreover, the study by Rachbini et al. (2020) brings attention to the impact of Internet literacy on Generation Z’s ability to critically evaluate product information. The findings suggest that individuals with higher Internet literacy levels exhibit a more discerning approach, leading to increased satisfaction arising from informed purchasing decisions.

However, the relationship between Internet literacy and customer satisfaction is multifaceted. Scholars like Almaiah et al. (2022) argue that while higher Internet literacy generally correlates with increased satisfaction, individual preferences and expectations play a crucial role. Thus, recognizing the diverse ways in which Generation Z utilizes Internet literacy in their online shopping journey becomes imperative for a comprehensive understanding.

In conclusion, the literature consistently supports the hypothesis that there is a positive and significant relationship between Internet literacy and customer satisfaction among Generation Z consumers in the online shopping domain. The studies cited highlight the nuanced interplay between digital proficiency, satisfaction, and informed decision-making, contributing valuable insights for businesses aiming to tailor their strategies to the preferences of this digitally astute consumer segment.

In doing so, it was hypothesized that,

\[ H2: \text{A positive and significant relationship exists between internet literacy and customer satisfaction among Generation Z consumers in the online shopping domain.} \]

2.3 Product Price and Customer Satisfaction

Exploring the intricate connection between product price and customer satisfaction is vital in understanding the preferences and behaviors of Generation Z consumers within the realm of online shopping. Generation Z, characterized by their unique digital upbringing, presents distinct patterns of interaction with online marketplaces, prompting a closer examination of how product pricing influences their satisfaction levels (Afshar et al., 2019; Lee & Lee, 2020). Research by Afthanorhan et al. (2019) delves into the role of product price in shaping the satisfaction of Generation Z consumers. The study finds a positive correlation, indicating that individuals within this demographic express higher satisfaction levels when they perceive a favorable balance between product prices and perceived value. This resonates with the notion that Generation Z is not merely price-sensitive but seeks value and quality in their online purchases (Kar, 2021).

Additionally, the work of Zhao et al. (2019) provides valuable insights into the nuanced considerations that Generation Z places on product pricing. The authors argue that while competitive prices are a key factor, Generation Z consumers are also influenced by transparency in pricing strategies. Clear and straightforward pricing mechanisms contribute to increased satisfaction among this demographic. The relationship between product price and customer satisfaction is a classic topic in consumer research. For Generation Z, who is often considered price-conscious, the perceived value of products is crucial in shaping their satisfaction levels. A study by Pei et al. (2020) found that Generation Z consumers are more likely to express satisfaction when they perceive a fair balance between product quality and price.

However, the relationship between product price and customer satisfaction is contingent on various factors. Studies by Shahid Iqbal et al. (2018) highlight the significance of brand perception in this dynamic. Generation Z consumers are more likely to derive satisfaction from their purchases when
they perceive the product price aligning with the perceived value of the brand, emphasizing the interconnected nature of product price, brand image, and overall satisfaction (Fida et al., 2020).

In conclusion, the existing literature aligns with the hypothesis that there is a positive and significant relationship between product price and customer satisfaction among Generation Z consumers in the online shopping domain. Understanding the intricate interplay between perceived value, brand perception, and pricing strategies is crucial for businesses seeking to cater to Generation Z's preferences and satisfaction criteria in the evolving landscape of online commerce (Fida et al., 2020). In doing so, it was hypothesized that,

**H3**: A positive and significant relationship exists between product price and customer satisfaction among Generation Z consumers in the online shopping domain.

### 3.4 Income and Customer Satisfaction

Investigating the interplay between income levels and customer satisfaction is essential to comprehend the dynamics of Generation Z's online shopping behaviors. Generation Z, marked by its digital fluency and diverse socio-economic backgrounds, prompts a nuanced examination of how income influences their satisfaction in the online marketplace (Dash et al., 2021).

While Generation Z may not have substantial disposable income compared to older generations, their spending patterns and satisfaction levels are still influenced by their financial situations. Research by Dabija & Lung (2019) suggests that Generation Z individuals with higher disposable income tend to report higher levels of satisfaction in their online shopping experiences. Research by Lee et al. (2023) offers insights into the role of income in shaping the satisfaction levels of Generation Z consumers. The study reveals a positive relationship, indicating that higher income levels correlate with increased satisfaction. This aligns with the notion that individuals with greater financial resources may have different expectations and preferences, contributing to heightened satisfaction when engaging in online shopping experiences.

Moreover, the study by Philippas & Avdoulas (2021) sheds light on the diverse ways income impacts the online shopping behaviors of Generation Z. The findings suggest that while higher income may contribute to increased satisfaction, other factors such as value perception, brand affinity, and personalized experiences also play significant roles. This emphasizes the multifaceted nature of the relationship between income and customer satisfaction.

However, it is crucial to recognize the potential for variations within the Generation Z demographic. Research by Rosdiana (2020) highlights the importance of considering diverse income brackets within this generation. The study suggests that satisfaction drivers may differ among subgroups, with individuals from lower-income backgrounds deriving satisfaction from different aspects, such as affordability and accessibility.

In conclusion, the literature supports the hypothesis that there is a positive and significant relationship between income and customer satisfaction among Generation Z consumers in the online shopping domain. Understanding the intricate connections between income, individual preferences, and diverse satisfaction drivers is imperative for businesses seeking to tailor their strategies to meet the evolving needs of Generation Z in the online retail landscape (Lee et al., 2023). In this regard, it was hypothesized that,
H4: There is a positive and significant relationship between income and customer satisfaction among Generation Z consumers in the online shopping.

2.5 Education and Customer Satisfaction

Education levels play a role in shaping Generation Z consumers' preferences and decision-making processes. Studies (Kamenidou et al., 2019; Szymkowiak et al., 2021) have shown that higher education levels are associated with increased satisfaction in online purchases, possibly due to an enhanced ability to evaluate product information critically. Examining the relationship between education levels and customer satisfaction is crucial for understanding the nuanced dynamics of Generation Z's online shopping behaviors. Generation Z, marked by its digital savviness and diverse educational backgrounds, necessitates exploring how education influences their satisfaction in the online retail landscape.

Research by Wang and Chen (2017) provides insights into the role of education in shaping the satisfaction levels of Generation Z consumers. The study reveals a positive correlation, indicating that individuals with higher educational attainment tend to express increased satisfaction in their online shopping experiences. This aligns with the notion that education may influence the way individuals evaluate and engage with online platforms, contributing to enhanced satisfaction.

Furthermore, the work of Priporas et al. (2020) underscores the importance of considering the specific aspects of education that impact customer satisfaction. The study suggests that individuals with a focus on e-commerce education or digital literacy courses tend to derive higher satisfaction from their online shopping interactions. This highlights the relevance of not only the level of education but also the nature of education in shaping satisfaction criteria.

However, the relationship between education and customer satisfaction is multifaceted. Research by Vasić et al. (2019) emphasizes the need to consider the influence of education on factors such as information processing and decision-making styles. Higher education levels may contribute to more informed and discerning choices, influencing satisfaction in a way that is distinct from individuals with lower educational attainment (Rodriguez et al., 2019).

In conclusion, the literature supports the hypothesis that there is a positive and significant relationship between education and customer satisfaction among Generation Z consumers in the online shopping domain. Understanding how different facets of education influence satisfaction criteria is crucial for businesses aiming to tailor their strategies to meet the evolving preferences of Generation Z in the online retail landscape (Rodriguez et al., 2019). Thus, it was hypothesized that,

H5: There is a positive and significant relationship between education and customer satisfaction among Generation Z consumers in online shopping.

2.6 Customer Satisfaction and Intention to Purchase

Exploring the dynamic connection between customer satisfaction and intention to purchase is pivotal for understanding the intricacies of Generation Z's online shopping behaviors (Dash et al., 2021). Generation Z, characterized by its digital immersion and distinct preferences, demands a nuanced examination of how satisfaction influences their subsequent purchase intentions. Building
on the extensive literature supporting the relationship between customer satisfaction and subsequent purchase intentions (Lestari, 2019; Lee et al., 2023), it is expected that a satisfied Generation Z consumer is more likely to exhibit an intention to engage in future online purchases.

Research by Djafarova and Bowes (2021) highlights the fundamental link between customer satisfaction and the intention to make future purchases. The study reveals a positive and significant relationship, suggesting that individuals who experience higher satisfaction in their online shopping endeavors are more likely to express a strong intention to engage in future purchases. This aligns with the notion that positive satisfaction outcomes contribute to a favorable predisposition towards continued patronage (Lee et al., 2023).

Furthermore, the work of Duffett (2020) delves into the factors that mediate the relationship between satisfaction and purchase intentions among Generation Z. The study identifies trust, perceived value, and the overall online shopping experience as key mediators, emphasizing that satisfaction acts as a catalyst shaping positive intentions to revisit and make future purchases. However, the relationship between customer satisfaction and intention to purchase is contingent on various factors. Studies by Dabija and Lung (2019) emphasize the role of individual preferences and the influence of external factors such as social media and peer recommendations. The interplay between satisfaction and purchase intentions is influenced by a myriad of factors unique to the Generation Z demographic.

In conclusion, the literature consistently supports the hypothesis that there is a positive and significant relationship between customer satisfaction and intention to purchase among Generation Z consumers in the online shopping domain. Understanding the mediating factors and contextual elements that influence this relationship is crucial for businesses seeking to tailor their strategies and cultivate lasting relationships with Generation Z consumers in the evolving landscape of online retail (Lestari, 2019). Thus, it was hypothesized that,

**H6: There is a positive and significant relationship between customer satisfaction and intention to purchase online among Generation Z consumers in the post-COVID-19 scenario.**

In summary, this literature review highlights the nuanced relationships between gender, internet literacy, product price, income, education, customer satisfaction, and intention to purchase among Generation Z. These hypotheses provide a structured framework for empirical investigation, aiming to contribute to the evolving understanding of online consumer behavior in the unique context of Generation Z and the post-COVID-19 era.
Figure 1 indicates that each and every variable in the framework influences (namely customers Gender, Internet Literacy, Product Price, Income, and Education) the customer satisfaction of individuals, especially students. Later, we investigated how customer satisfaction affects the intention to purchase online.

3. Research Method

3.1 Research Design

This quantitative study employed a cross-sectional design to investigate the relationship between demographic factors, customer satisfaction, and purchase intentions among Generation Z university students in Dhaka, Bangladesh (Polas & Raju, 2021).

3.2 Sampling Technique

Stratified random sampling was employed to ensure representation from various academic disciplines. The population was stratified based on academic departments, and participants were
randomly selected from each stratum. A total of 500 questionnaires were distributed among Gen Z university students. The study involved 433 respondents, all of whom were university students in Dhaka, Bangladesh. The participants were selected from diverse academic disciplines to capture a comprehensive view of Gen Z preferences.

3.3 Data Collection

Data collection utilized a structured questionnaire consisting of five-point Likert scale items, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). The questionnaire, adapted from existing literature and studies, aimed to assess variables such as gender, internet literacy, product price perception, income, education, customer satisfaction, and intention to purchase. To enhance participation, respondents were offered an incentive in the form of ice cream. This incentive aimed to promote a positive response rate and foster a collaborative and engaging research environment.

3.4 Data Analysis

Data analysis was conducted using SPSS Version 25. Descriptive statistics, correlation analysis, and regression analysis were employed to examine the relationships between variables. Tests for normality, non-response bias, and common method bias were conducted to ensure the validity and reliability of the data.

3.5 Ethical Considerations

Ethical approval was obtained from the relevant institutional review board before data collection. Informed consent was obtained from each participant, emphasizing voluntary participation and confidentiality of responses.

3.6 Validation and Rigor

Several measures were taken to ensure the validity and rigor of the study. A pilot test was conducted to refine the questionnaire, and statistical tests were employed to address issues such as normality and bias. These steps contributed to the overall robustness and credibility of the study's methodology.

4. Result and Discussion

Table 1: Descriptive Correlations

<table>
<thead>
<tr>
<th>Name of variables</th>
<th>Mean</th>
<th>STD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>1.65</td>
<td>0.06</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet Literacy</td>
<td>2.67</td>
<td>0.45</td>
<td>0.532**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Price</td>
<td>3.54</td>
<td>0.39</td>
<td>0.413**</td>
<td>0.554**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income</td>
<td>3.78</td>
<td>0.12</td>
<td>0.513**</td>
<td>0.427**</td>
<td>0.556**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>4.54</td>
<td>0.37</td>
<td>0.410**</td>
<td>0.565**</td>
<td>0.561**</td>
<td>0.410**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td>3.89</td>
<td>0.78</td>
<td>0.458**</td>
<td>0.499**</td>
<td>0.458**</td>
<td>0.441**</td>
<td>0.498**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intention to Purchase</td>
<td>3.78</td>
<td>0.67</td>
<td>0.547**</td>
<td>0.526**</td>
<td>0.553**</td>
<td>0.543**</td>
<td>0.237**</td>
<td>0.567**</td>
<td>1</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).
Correlation analysis was conducted using the Pearson-Correlation method within the SPSS software. As presented in Table 1, the results encompass descriptive statistics and correlation coefficients. Table 1 demonstrates a statistically significant and positive correlation between the independent variables and the dependent variables. However, it is noteworthy that each independent variable does not exhibit an identical level of correlation with the dependent variables. In total, eleven variables were subjected to the correlation analysis, comprising five independent variables and two dependent variables, with one of them possessing a dual-phase role. To provide further clarity, it is essential to elucidate that the variable "customer satisfaction" assumes a bifoliate function in the analysis. Initially, it serves as a dependent variable, while the variables of gender, internet literacy, product price, income, and education function as independent variables. Subsequently, in a distinct analysis, "customer satisfaction" assumes the role of an independent variable, while "intention to purchase" is designated as the dependent variable.

The independent variables (IVs) and the dependent variables (DVs) clearly exhibit a notable association when seen in the context of Table 1. For more information, note that each independent variable has a statistically significant association with the dependent variables. The first independent variable, "gender," which has a significant connection with "internet literacy" at a significance level of 0.532**, is a good place to start when explaining the data. Similar to the first independent variable, "internet literacy" also exhibits a significant connection with the third independent variable, "product price," at a noticeably higher significance level of 0.554**. A substantial link between the third independent variable, "product price," and "income," is seen similarly at a significance level of 0.556**. Additionally, at a significant level of 0.567**, the independent variable "customer satisfaction" strongly links with "intention to purchase." In this way, each and every variable is correlated with each other at the various significant level.

Table 2: Direct relationship between IVs and DV

<table>
<thead>
<tr>
<th>Name of Variables</th>
<th>Customer Satisfaction</th>
<th>Intention to Purchase</th>
<th>t-value</th>
<th>p-value</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>0.443***</td>
<td></td>
<td>3.858</td>
<td>0.000</td>
<td>2.664</td>
</tr>
<tr>
<td>Internet Literacy</td>
<td>0.432***</td>
<td></td>
<td>4.038</td>
<td>0.000</td>
<td>2.455</td>
</tr>
<tr>
<td>Product Price</td>
<td>0.694***</td>
<td></td>
<td>5.045</td>
<td>0.000</td>
<td>2.545</td>
</tr>
<tr>
<td>Income</td>
<td>0.102*</td>
<td></td>
<td>2.212</td>
<td>0.034</td>
<td>2.491</td>
</tr>
<tr>
<td>Education</td>
<td>0.189*</td>
<td></td>
<td>2.564</td>
<td>0.022</td>
<td>2.021</td>
</tr>
<tr>
<td>Customer Satisfaction</td>
<td></td>
<td>0.859***</td>
<td>7.654</td>
<td>0.000</td>
<td>1.443</td>
</tr>
<tr>
<td>R2</td>
<td>0.658</td>
<td></td>
<td>0.267</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adj. R2</td>
<td>0.545</td>
<td></td>
<td>0.158</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>6.356***</td>
<td></td>
<td>2.357**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2 shows the direct relationship between independent variables and dependent variable. A systematic assembly of all the components was carried out in this study in line with the hypothesized framework to determine if the data we collected were consistent with the research aims (Kaiser Meyer Olkin (KMO) = 0.875; Bartlett's = 0.000). Additionally, confirmatory factor analysis (CFA), following the accepted guidelines espoused by Anderson and Gerbing (1988), was used to examine the convergent validity. Furthermore, we wanted to know whether the items used
in this study showed acceptable factor loading on the associated theoretical constructs at a level of statistical significance.

To begin with, it was assumed in the H1, H2, H3, H4, and H5 that there are positive and significant relationships between customer gender, internet literacy, product price, income, education with their satisfaction level. In the way, in the first hypothesis, our research found a positive link between customer gender and satisfaction ($\beta = 0.443^{***}, p < 0.001$; see Table 2). Thus, hypothesis 1 is accepted and supported by the studies of Sharma et al. (2012), Omar et al. (2016), and Nyarku et al. (2018). After that, a positive and significant relationship is found between customer’s internet literacy and their customer satisfaction ($\beta = 0.432^{***}, p < 0.001$, Table 2). Thus, hypothesis 2 is accepted and is supported by the studies of Santouridis et al. (2009), Shahid Iqbal et al. (2018) and Eriksson et al. (2020). Furthermore, a positive and significant is found between product price and customer satisfaction level ($\beta = 0.694^{***}, p < 0.001$, see Table 2). In this way, hypothesis 3 is accepted and is supported by the studies of Waluya et al. (2019), Prasetyo et al. (2022), and Cahaya et al. (2023). Moreover, as seen in Table 2, hypothesis 4 confirms a positive and significant relationship between customer’s income and satisfaction level ($\beta = 0.102^*, p < 0.05$). In this way, hypothesis 4 is accepted and is supported by the studies of Angamuthu (2015), Ramanathan and Ramanathan (2016), Polas et al. (2019). Furthermore, hypothesis 5 acknowledges that a positive and significant relationship is sustained between customer’s education and their satisfaction level ($\beta = 0.189^*, p < 0.05$). In this way, hypothesis 5 is accepted and supported by the studies of Angamuthu (2015), Ramanathan and Ramanathan (2016), and Polas et al. (2019). This indicates that any increase or decrease in customer’s gender, internet literacy, product price, income, and education will result in a corresponding increase in or decrease in consumers’ satisfaction to buy more products.

From that point forward, in the last hypothesis, we assumed that there is a positive and significant relationship between customer satisfaction and intention to purchase ($\beta = 0.859^{***}, p < 0.001$). Thus, hypothesis 6 is accepted and is supported by the studies of Ali (2016), Poushneh et al. (2017) Khatoon et al. (2020). This indicates that any increase or decrease in customer satisfaction will result in a corresponding increase in or decrease in consumers' intentions to purchase things.

**Discussion and Implications of the study**

The study is to examine the relationships between demographic factors, customer satisfaction, and online purchase intentions among Generation Z in the aftermath of the COVID-19 pandemic. Specifically, we aim to: (a) evaluate the impact of gender, internet literacy, product price, income, and education on the satisfaction levels of Generation Z consumers in the online shopping domain, (b) examine the association between customer satisfaction and the intention to purchase online within the post-COVID-19 scenario. The surge in online shopping during the post-COVID-19 era has reshaped the landscape of consumer behavior, particularly among Generation Z. This study delved into the effects of demographic factors on customer satisfaction and subsequent purchase intentions within this dynamic context. The findings offer valuable insights into the intricate web of relationships shaping the online shopping experiences of Generation Z.

In this study, we delved into the intricate relationship between Generation Z's demographics, their satisfaction with online shopping experiences, and the subsequent impact on their intention to
make online purchases. The intersection of gender, internet literacy, product price, income, and education has unveiled a rich tapestry of insights, shedding light on the nuanced dynamics that shape the post-pandemic shopping landscape.

Our findings underscore the significance of gender in shaping Generation Z's online shopping satisfaction. While traditionally studies have highlighted differences in shopping behaviors between genders, our research takes a step further, revealing that in the era of E-Commerce Evolution 4.0, gender plays a pivotal role not just in shaping preferences but also in determining satisfaction levels. Female respondents, for instance, demonstrated a higher level of satisfaction, indicating that tailored strategies considering gender-specific preferences may be instrumental in enhancing the overall shopping experience.

The digital shopping realm has broken traditional gender stereotypes, and understanding these evolving dynamics can empower businesses to craft marketing strategies that resonate with diverse gender identities, thus fostering a more inclusive shopping environment.

Internet literacy emerges as a potent catalyst influencing customer satisfaction in the digital shopping landscape. Those with higher internet literacy reported heightened satisfaction levels, emphasizing the importance of digital education and navigation skills. Businesses should take note of this finding and consider investing in user-friendly interfaces, clear navigation pathways, and educational initiatives to bridge the digital divide. This not only caters to the current generation but also sets the stage for future generations to seamlessly navigate the digital marketplace.

Unpacking the intricate relationship between product price, income, and satisfaction, our study indicates that the perceived value of products influences satisfaction levels. Striking a balance between product pricing and income demographics is crucial for businesses aiming to cater to the diverse financial capacities of Generation Z. The digital shopper's dilemma, as identified in our study, calls for adaptive pricing strategies, discounts, and targeted marketing campaigns to align with varying income brackets, ensuring that satisfaction is not compromised due to financial constraints.

Education emerged as a driving force influencing both internet literacy and shopping satisfaction. Higher levels of education were associated with increased satisfaction, showcasing the importance of intellectual empowerment in the digital age. This finding holds implications for businesses and policymakers alike, urging them to invest in educational initiatives that equip individuals with the skills necessary to navigate the ever-evolving digital landscape.

Perhaps the most crucial implication of our study lies in the direct link between satisfaction levels and the intention to make online purchases. Satisfied customers are not merely content consumers but potential brand advocates and loyal patrons. Crafting strategies that prioritize customer satisfaction becomes imperative for businesses aiming to not only secure initial transactions but also foster long-term relationships and repeat business.

In the era of E-Commerce Evolution 4.0, characterized by rapid technological advancements and shifting consumer behaviors, the implications of our study extend beyond individual demographics. Businesses need to embrace a holistic approach that considers the intersectionality of these factors. Tailoring strategies to cater to specific demographics while acknowledging the
interconnected nature of these variables will be instrumental in navigating the complexities of the
digital shopper's dilemma.

The COVID-19 pandemic acted as a catalyst, propelling Generation Z further into the realm of
online shopping. With restrictions on physical interactions and a heightened emphasis on safety,
the convenience and accessibility of online platforms became paramount. The surge in internet
literacy, coupled with an evolving socio-economic landscape, transformed online shopping from
a convenience to a necessity for Generation Z during these unprecedented times.

This study was guided by several theoretical frameworks, with the Social Identity Theory and
Consumer Satisfaction Models playing pivotal roles. Social Identity Theory, posited by Tajfel and
Turner (1986), was instrumental in understanding how demographic factors such as gender,
income, and education contribute to the construction of identity, influencing preferences and
satisfaction criteria. Consumer Satisfaction Models, drawing from literature by Oliver (1980) and
Anderson and Sullivan (1993), provided a lens through which to explore the complex interplay
between customer satisfaction and intention to purchase.

Moreover, the study uncovered positive and significant relationships between gender, internet
literacy, product price, income, and education with customer satisfaction among Generation Z.
Each demographic factor played a unique role in shaping the satisfaction levels of this cohort,
emphasizing the need for tailored marketing strategies. Furthermore, the study identified a robust
and positive link between customer satisfaction and the intention to purchase online, signifying
the pivotal role of a satisfying online shopping experience in driving future consumer behavior.

Furthermore, for businesses navigating the post-COVID-19 landscape, understanding Generation
Z's nuanced preferences and satisfaction drivers is paramount. Tailored marketing strategies that
acknowledge the diverse influences of demographic factors can enhance customer satisfaction and
foster long-term brand loyalty. Policymakers should also consider the evolving digital landscape
in crafting regulations and support structures that facilitate a secure and enriching online shopping
environment for Generation Z.

In sum, our research sheds light on the multifaceted relationship between demographics,
satisfaction, and the intention to purchase within the context of Generation Z's post-pandemic
shopping trends. As businesses navigate the uncharted waters of E-Commerce Evolution 4.0,
understanding and adapting to these dynamics will not only ensure short-term success but also
pave the way for sustainable growth and resilience in the ever-evolving digital marketplace.

5. Conclusion

Like other studies, this study is not beyond limitations. This study sheds light on the evolving
dynamics of Generation Z online shopping post-COVID-19, emphasizing the critical role of
demographic factors in shaping satisfaction and purchase intentions. As the digital landscape
continues to evolve, future research could delve deeper into the impact of emerging technologies,
explore cross-cultural variations within Generation Z, and investigate the sustainability
implications of increased online consumption. By staying attuned to the ever-changing preferences
of Generation Z, businesses and policymakers can navigate the digital frontier with agility and
relevance.

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