

Demographic Differences in Consumer Trust and Online Purchase Decisions: Evidence from Smartphone Purchases in E-Commerce

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ABSTRACT

The rapid growth of e-commerce requires a deeper understanding of the differences in consumer responses to online transactions. This study examines whether consumer trust and online purchase decisions differ based on gender, age, monthly expenditure, and online shopping experience in smartphone purchases through e-commerce platforms. A quantitative approach was employed using survey data from 385 students from private higher education institutions in Jakarta Province who had experience purchasing smartphones online. Data were collected using a five-point Likert-scale questionnaire and analyzed using descriptive statistics, independent-samples t-test, and one-way ANOVA with the SPSS software. The findings show that gender, age, and monthly expenditure do not produce statistically significant differences in consumer trust and online purchase decisions. Online shopping experience also did not produce a statistically significant difference in consumer trust ($p = 0.141$), but a statistically significant difference was found in online purchase decisions ($p = 0.044$). The mean difference was relatively small, with a Cohen's d of approximately 0.22. These findings suggest that online shopping experience may provide additional discriminatory value for online purchase decisions beyond basic demographic characteristics, although its practical effect is relatively small in this study.

ABSTRAK

Perkembangan e-commerce yang pesat menuntut pemahaman yang lebih mendalam mengenai perbedaan respons konsumen dalam transaksi online. Penelitian ini bertujuan untuk menganalisis apakah terdapat perbedaan kepercayaan konsumen dan keputusan pembelian online berdasarkan jenis kelamin, usia, pengeluaran bulanan, dan pengalaman belanja online dalam pembelian smartphone melalui platform e-commerce. Penelitian menggunakan pendekatan kuantitatif dengan data survei dari 385 mahasiswa perguruan tinggi swasta di Provinsi Jakarta yang memiliki pengalaman membeli smartphone secara online. Data dikumpulkan menggunakan kuesioner berskala Likert lima poin dan dianalisis menggunakan statistik deskriptif, independent-samples t-test, dan one-way ANOVA dengan bantuan SPSS. Hasil penelitian menunjukkan bahwa jenis kelamin, usia, dan pengeluaran bulanan tidak menghasilkan perbedaan yang signifikan secara statistik pada kepercayaan konsumen maupun keputusan pembelian online. Pengalaman belanja online juga tidak menunjukkan perbedaan signifikan pada kepercayaan konsumen ($p = 0,141$), tetapi menunjukkan perbedaan signifikan pada keputusan pembelian online ($p = 0,044$). Selisih rata-rata relatif kecil dengan Cohen's d sekitar 0,22. Temuan ini menunjukkan bahwa pengalaman belanja online dapat memberikan nilai diskriminatif tambahan dalam membedakan keputusan pembelian online dibandingkan karakteristik demografis, meskipun besarnya efek secara praktis relatif kecil.

1. INTRODUCTION

The rapid development of information technology has significantly transformed consumer behavior in the digital marketplace (Erlangga et al., 2024). E-commerce platforms provide consumers with convenience in accessing information, comparing products, and making transactions without geographical limitations. Consequently, online purchasing activities have increased substantially, particularly among young consumers who are highly familiar with digital technologies. In the context of e-commerce transactions, consumer trust and purchase decisions are considered essential factors that determine the success of online transactions (Gupta et al., 2023) (Krisna, 2025). Trust becomes particularly important because consumers often face uncertainty and perceived risks when purchasing products online, such as concerns about product quality, data security, and transaction reliability (Handoyo, 2024).

From a theoretical perspective, consumer behavior theories emphasize that purchasing decisions are influenced by various factors, including psychological, social, and demographic characteristics (Dhawan & Garga, 2025). Several previous studies have suggested that demographic variables, such as gender, age, and income level, may influence consumers' online purchasing behavior and trust in e-commerce platforms. These studies argue that differences in demographic characteristics can shape consumers' perceptions of risk, trust, and decision-making processes in online transactions (Indiani et al., 2024) (Leonov et al., 2023).

However, in the current digital environment, especially among digital-native consumers, the role of traditional demographic factors may become less dominant. Digital-native consumers are generally characterized by high levels of technology adoption, digital literacy, and familiarity with online platforms. Consequently, differences in demographic characteristics may not necessarily lead to differences in consumer behavior in e-commerce (Jeong et al., 2026) (Adel, 2024) (Khusaini et al., 2019). This creates a research gap between *das sollen*, which assumes that demographic factors are associated with differences in consumer behavior, and *das sein*, where consumers with similar technological experiences may demonstrate relatively homogeneous purchasing behavior regardless of demographic differences.

Several recent studies have examined the factors influencing consumer trust and online purchase decisions in e-commerce environments (Rolando, Benedictus; Chondro, 2025) (Firdaus Firdaus et al., 2023) (Hartanto et al., 2022). Previous research highlights the importance of trust in shaping online purchasing behavior and reducing perceived risks in digital transactions (Ratnasari et al., 2023) (Ramadhan, 2025). Other studies also emphasize the role of online experience and interaction with digital platforms in influencing consumer decision-making (Hamdani et al., 2022) (Chiguvi et al., 2025) (Najiatun & Firdaus, 2025). However, empirical studies that specifically analyze demographic differences in consumer trust and online purchase decisions, particularly for high-involvement products such as smartphones, remain limited.

Therefore, this study aimed to examine differences in consumer trust and online purchase decisions across four consumer characteristics – gender, age, monthly expenditure, and online shopping experience – in the context of smartphone purchases through e-commerce platforms. By examining these dimensions simultaneously among students from private universities in Jakarta Province, this study provides a more specific demographic perspective than general studies of e-commerce purchasing behavior. The novelty of this research lies in assessing whether traditional demographic characteristics remain useful for differentiating consumer trust and online purchase decisions among digitally familiar student consumers, while also examining whether online shopping experience produces different patterns of consumer responses.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

2.1. Theoretical Framework

2.1.1 Consumer Trust in Ecommerce

Consumer trust is considered a fundamental element in online transactions because consumers cannot directly evaluate products or physically interact with sellers (Ingriana, 2024). Trust refers to consumers' willingness to rely on a seller or platform based on the expectation that the transaction will be conducted reliably and securely (Ikhlash & Linda, 2024) (Slaton, 2025). Trust refers to the belief that the seller or e-commerce platform has the ability, honesty, and good faith to fulfill transaction commitments (Pavlou, 2003). Trust in an online environment is formed through perceptions of security, integrity, and reliability of the platform (Florea et al., 2025) (Hasbiah & Hasdiansa, 2025). In the context of e-commerce, consumer trust plays an important role in reducing the perceived risks associated with online transactions (Rahmaningtyas et al., 2025) (Hipólito et al., 2025).

Previous empirical studies have shown that consumer trust significantly influences consumers' willingness to engage in online transactions (Hidayat et al., 2021) (Sulistyowati & Husda, 2023). Trust helps

consumers overcome uncertainty and increases their confidence in making purchasing decisions in digital spaces. Therefore, understanding the factors that may influence consumer trust remains an important topic in e-commerce research.

2.1.2. Online Purchase Decision

Online purchase decisions refer to the process through which consumers evaluate alternatives, select products, and complete purchases through digital platforms. Purchase decisions represent the stage in the consumer decision-making process in which consumers evaluate available alternatives and select the product that best meets their needs (Kotler & Keller, 2016). In an e-commerce environment, this process occurs through digital platforms and involves consumers evaluating product information, alternatives, perceived benefits and potential risks.

Online consumer decision-making involves evaluating information and alternatives in social commerce environments, with online trust and perceived risk being relevant considerations in the purchasing process (Lăzăroiu et al., 2020). Similarly, the online purchase decision-making process across e-commerce, mobile commerce, and social commerce platforms is associated with consumers' digital experiences and purchasing behaviors (Petcharat & Leelasantitham, 2021). Furthermore, digital channels support consumers throughout the purchasing process, including information search and evaluation of alternatives before completing a purchase (Pires et al., 2022).

Several studies have demonstrated that online purchasing behavior is influenced not only by system-related factors such as security and usability but also by individual characteristics of consumers (Chen et al., 2022) (Safitri et al., 2024) (Gobbilla & Sanjana, 2025). These characteristics may affect how consumers perceive risks and evaluate information when making purchasing decisions through e-commerce platforms. Therefore, online purchase decisions in the present study refer to consumers' decision-making responses when evaluating, selecting, and purchasing smartphones through e-commerce platforms.

2.1.3. Demographic Factors in Online Consumer Behavior

Demographic characteristics are often used to explain differences in consumer behavior. Variables such as gender, age, and income level are frequently considered important determinants of purchasing behavior and trust in digital transaction. Some studies suggest that gender differences may influence consumers' risk perception and trust in online transactions (Hariningsih et al., 2022) (Islam et al., 2026). For example, female consumers are often considered more cautious and information-oriented when evaluating products in e-commerce.

Age is also frequently associated with differences in technology adoption and online purchasing behavior (Dawam et al., 2025) (Král' et al., 2025). Younger consumers are generally more familiar with digital technologies and may demonstrate higher levels of trust and engagement with online platforms (Ngo et al., 2025) (Catană et al., 2025). In addition, economic factors, such as income or expenditure levels, may influence consumers' purchasing power and purchasing decisions in online marketplaces.

However, in the era of digital transformation, especially among digital native consumers, the influence of demographic characteristics may become less significant. Consumers who are accustomed to using digital platforms may demonstrate similar behaviors regardless of demographic differences. Therefore, examining demographic differences in consumer trust and purchase decisions remains relevant for understanding contemporary e-commerce behavior.

2.2. Hypothesis Development

2.2.1 Gender and Consumer Trust

Gender has been examined as a demographic characteristic that may differentiate consumers' perceptions and behavioral responses in online settings. Differences in perceived risk, privacy concerns, information processing, and shopping motivations may contribute to differences in how male and female consumers develop trust in e-commerce. A study conducted in a developing country found that gender was significantly associated with consumer trust and online purchase intention (Faqih, 2022). These findings suggest that male and female consumers may differ in their perceptions and evaluations of online transactions, particularly regarding trust and perceived risk. However, the role of gender may vary across e-commerce contexts and consumer characteristics. Therefore, further empirical examination is needed to determine whether male and female consumers demonstrate significantly different levels of consumer trust in specific online purchasing contexts.

This issue is particularly relevant in the present study because the respondents are university

students who purchased smartphones through e-commerce platforms. Although the respondents shared relatively similar educational and digital environments, gender may still be associated with differences in perceptions of online transactions and trust. Examining gender differences in this relatively homogeneous consumer group may therefore provide further evidence regarding whether gender has discriminatory value for consumer trust in e-commerce transactions.

Based on the theoretical argument and empirical evidence regarding gender differences in online consumer trust, the following hypothesis is proposed:

H1: Consumer trust in e-commerce transactions differs significantly according to gender.

2.2.2 Gender and Online Purchase Decision

Gender may be associated with differences in online purchase decision-making because male and female consumers may differ in their information evaluation, perceived risk, shopping motivations, and product preferences. These differences may influence how consumers evaluate alternatives and make purchasing decisions in e-commerce.

The effects of gender and age on purchase intention and purchase behavior have been examined in the context of e-commerce in Indonesia, considering several motivational factors underlying online purchasing, including convenience, website quality, social influence, facilitating conditions, hedonic motivation, economic reasons, security, product variety, and delivery (Alfanur & Kadono, 2022).

A study in a developing country context found that gender was significantly associated with consumer trust and online purchase intention (Safitri et al., 2024). The findings showed that gender was significantly associated with differences in actual online purchases using both bank-card and cash-on-delivery transactions, indicating that male and female consumers may demonstrate different patterns of online purchasing behavior.

However, this evidence does not necessarily indicate that gender produces uniform differences across all online purchasing contexts. A recent meta-analytic review of online purchase intention identified gender as an important demographic variable but also noted that previous findings regarding gender differences in online purchasing behavior were inconsistent. The review suggests that the role of gender may depend on consumers' technological experience, purchasing context, and factors considered in the decision-making process.

These findings provide an empirical basis for further examination of gender differences in online purchase decisions. Although previous studies have investigated gender in relation to online purchasing behavior, limited evidence specifically addresses whether male and female university students differ in their purchase decisions when purchasing smartphones through e-commerce platforms. Therefore, this study examines whether online purchase decisions differ significantly based on gender among university students purchasing smartphones through e-commerce platforms.

Based on the theoretical argument and empirical evidence regarding gender differences in online purchasing behavior, the following hypothesis is proposed:

H2: Gender significantly influences online purchase decisions in e-commerce transactions.

2.2.3 Age and Consumer Trust

Age is a demographic characteristic that may shape consumers' perceptions and behavioral responses to e-commerce transactions. Age-related differences may be associated with variations in digital familiarity, information processing patterns, perceived risk, and prior experience with online platforms. Accordingly, younger and older consumers may differ in their assessment of information, platform features, and potential risks when forming trust in online transactions.

Previous studies have found that age may be associated with differences in consumer trust in online settings. The influence of age and gender on consumer-to-consumer e-commerce has been examined, with findings suggesting that the factors underpinning consumer trust vary by age group. Among consumers aged 40 and above, trust in buyers or sellers was an important factor, whereas consumers in their 20s and 30s exhibited different trust-forming mechanisms (Yoon & Occeña, 2015). These findings suggest that age may shape the way consumers develop trust in online environments.

Similarly, generational cohorts differ in the way they transfer trust from company-generated and user-generated information to social commerce websites (Herrando et al., 2019). Based on an online survey of 715 social commerce users aged 16–55 years, Generation X relied more on company-generated information,

whereas Generation Z relied more on user-generated information. Generation Y also demonstrates a distinct pattern of trust formation. These findings suggest that differences in age or generational cohorts may influence how consumers evaluate information and develop trust in digital commerce platforms.

However, empirical evidence regarding the role of age in online consumer behavior is inconsistent. A study of Indonesian online consumers found that age was not a significant predictor of actual purchases, indicating that demographic differences do not necessarily translate into differences in online purchasing behavior (Safitri et al., 2024). Similarly, demographic characteristics did not moderate the relationship between online purchase intention and actual purchase, although demographic factors were relevant to the relationship involving trust and purchase behavior (Luh et al., 2024). These findings indicate that the role of demographic characteristics in digital consumer behavior remains context-dependent.

This issue is particularly relevant in the present study because the respondents are students from private universities in Jakarta, who are generally exposed to digital technologies and e-commerce platforms. Although respondents may belong to different age groups, their relatively similar educational and digital environments may reduce the extent to which age differentiates their perceptions of trust. Therefore, this study examines whether consumer trust differs significantly across age groups in the context of smartphone purchases through e-commerce platforms.

Based on the theoretical argument and mixed empirical evidence regarding the role of age in online consumer trust, the following hypothesis is proposed:

H3: Consumer trust in e-commerce transactions differs significantly by age.

2.2.4 Age and Online Purchase Decision

Age may be associated with differences in online purchase decisions because consumers from different age groups may differ in their digital familiarity, online shopping experience, information processing patterns, and purchasing preferences. These differences may be particularly relevant for products such as smartphones, which generally require consumers to search for information, compare alternatives, and evaluate product attributes before making a purchase.

Recent empirical studies have provided evidence that age may be relevant to online purchase decision-making. Research involving consumers aged 18 to 60 years examined the role of age in browsing habits and factors affecting online purchase decisions, demonstrating the relevance of age as a demographic characteristic in understanding consumers' online purchasing behaviors (Mammen et al., 2021). Similarly, a study of 433 Facebook consumers in Hungary found significant differences in online purchase behavior across age groups, particularly between younger consumers and those over 50 years old, indicating that age may differentiate online purchasing behavior and decision-making (Farkas et al., 2021).

However, recent evidence also indicates that the role of age in online purchasing is not always consistent. Previous research examining demographic characteristics, including age, gender, occupation, income, and trust, found that these characteristics do not uniformly differentiate actual online purchasing behavior among Indonesian consumers (Safitri et al., 2024b). However, Similarly, demographic characteristics do not consistently moderate the relationship between consumer trust and online purchase behavior (Indiani et al., 2024). These mixed findings provide a basis for further examination of age differences in online purchasing decisions.

This study is particularly relevant because the respondents are students from private universities in Jakarta, who generally share relatively similar educational and digital environments. Although the respondents belong to different age groups, their common exposure to digital technologies and e-commerce platforms may reduce the extent to which age differentiates their purchasing decisions. Therefore, this study examines whether online purchase decisions differ significantly across age groups in the context of smartphone purchases through e-commerce platforms.

Based on the theoretical argument and mixed empirical evidence regarding the role of age in online purchasing behavior, the following hypothesis is proposed:

H4: Online purchase decisions differ significantly by age group in e-commerce.

2.2.5 Monthly Expenditure and Consumer Trust

Monthly expenditure represents an economic characteristic that may be associated with consumers' financial capacity and their evaluation of risk and reliability in e-commerce transactions. Consumers with different financial capacities may perceive and respond to online transaction risks differently, potentially

resulting in differences in consumer trust.

Recent research provides evidence that consumers' spending characteristics may be relevant to the formation of trust in online shopping. Previous research indicates that e-shopping spending may be associated with differences in consumer trust levels. E-shopping spending significantly moderated the relationship between product variety and customer trust, with the effect of product variety on trust being stronger among consumers with lower e-shopping spending; however, the relationship was not significant among consumers with higher e-shopping spending (Mofokeng, 2023). These findings indicate that consumers' spending levels may shape the contribution of specific characteristics of online shopping environments to trust formation.

Similarly, (Indiani et al., 2024) found that income, as an economic characteristic, played a moderating role in the relationship between consumer trust and online purchase behavior. Their findings suggest that the role of trust in digital purchasing may vary across consumers with different economic characteristics.

However, the evidence is inconclusive. A meta-analysis found no significant difference in the effect of consumer trust on e-commerce purchase decisions between high- and low-income countries (Handoyo, 2024). This finding suggests that the importance of consumer trust in e-commerce may remain relatively consistent across different socioeconomic contexts.

These mixed findings provide a basis for further examination of economic characteristics in relation to consumer trust. Moreover, previous studies have examined e-shopping spending or income in relation to trust and trust-related purchasing behavior; however, limited evidence is available regarding whether consumer trust differs across monthly expenditure groups. Therefore, the present study examines whether consumer trust differs significantly across monthly expenditure groups among university students purchasing smartphones through e-commerce platforms.

Based on the theoretical argument and mixed empirical evidence regarding the role of economic characteristics in consumer trust, the following hypothesis is proposed.

H5: Consumer trust differs significantly according to the monthly e-commerce expenditure level.

2.2.6 Monthly Expenditure and Online Purchase Decision

Monthly expenditure represents an economic characteristic that may be associated with consumers' purchasing capacity and their evaluation of price, affordability, and product value. Consumers with different levels of financial resources may evaluate online purchasing alternatives differently, particularly when purchasing relatively high-involvement products such as smartphones, which require information searches, price comparisons, and evaluations of product benefits.

Previous research provides mixed evidence regarding the role of consumers' financial characteristics in online purchasing behavior. Average monthly spending on mobile commerce was found to be positively associated with consumers' purchase intentions, suggesting that spending behavior may be related to consumers' willingness to purchase through digital platforms (Xiong, 2022). In contrast, no significant difference in online purchase decisions was found based on average monthly income among university students (Nomcharoen et al., 2025). This mixed evidence is also reflected in the broader literature. A recent meta-analytic review of online purchase intention identified income as a relevant demographic characteristic but noted that previous findings regarding its role in online shopping behavior have been inconsistent. These findings suggest that the relationship between consumers' financial characteristics and online purchases may depend on the specific measure of economic capacity, consumer characteristics, and purchasing context. Moreover, previous studies have generally examined income, spending behavior, or purchase intention, while limited evidence is available regarding whether monthly expenditure specifically differentiates online purchase decisions among university students purchasing smartphones through e-commerce platforms. Therefore, the present study examines whether online purchase decisions differ significantly across monthly expenditure groups in the context of smartphone purchases through e-commerce platforms.

Based on the theoretical argument and mixed empirical evidence regarding the role of economic characteristics in online purchasing, the following hypothesis is proposed:

H6: Online purchase decisions differ significantly based on monthly e-commerce expenditure levels.

2.2.7 Online Shopping Experience and Consumer Trust

The online shopping experience represents consumers' accumulated experience when interacting with e-commerce platforms, including searching for products, evaluating sellers, completing transactions,

making payments, and receiving products. Repeated interactions may increase familiarity with online shopping procedures and reduce uncertainty, potentially contributing to the development of consumer trust in the seller.

Previous research provides evidence that online shopping experiences may be associated with consumer trust. A study of Indonesian consumers using Shopee found that online shopping experience had a positive and significant relationship with customer trust (Sofiani & Sagir, 2022). This finding suggests that previous experience with an e-commerce platform may contribute to trust formation as consumers become more familiar with the platform and its transaction processes. Similarly, online shopping experience was found to significantly moderate the relationship between product variety and customer trust (Mofokeng, 2023). This finding indicates that consumers' accumulated experience may be associated with differences in how they evaluate the characteristics of an online shopping environment when developing trust.

However, the empirical evidence is inconsistent. A study of 247 Indonesian e-commerce consumers found that online shopping experience did not significantly moderate the relationship between consumer trust in e-retailers and purchase intention (Amarullah et al., 2022). Similarly, a meta-analysis found no significant difference in the relationship between trust and purchasing decisions between Internet users and online shoppers, suggesting that online shopping experience may not always be associated with substantial differences in trust-related behavior (Handoyo, 2024).

These mixed findings indicate that the role of online shopping experience in consumer trust may depend on the nature of the experience, the level of familiarity with the platform, and the specific context of e-commerce. Moreover, previous studies have predominantly examined the online shopping experience as a predictor or moderating variable rather than directly comparing consumer trust across different experience groups. Therefore, this study examines whether consumer trust differs significantly based on the online shopping experience of university students purchasing smartphones through e-commerce platforms.

Based on the theoretical argument and mixed empirical evidence regarding the role of online shopping experience in trust formation, the following hypothesis is proposed:

H7: Consumer trust differs significantly based on the online shopping experience in e-commerce transactions.

2.2.8 Online Shopping Experience and Online Purchase Decision

Online shopping experience represents consumers' accumulated interactions with e-commerce platforms, including searching for products, evaluating alternatives, interacting with sellers, completing transactions, making payments, and receiving purchased products. Previous experiences may increase consumers' familiarity with online shopping procedures and platform features, which may subsequently affect how they evaluate alternatives and make purchase decisions.

Previous empirical studies have provided evidence that the online shopping experience is associated with consumers' purchase decisions. A study on students with experience purchasing through Shopee and JD.ID found that the online shopping experience was significantly related to customer purchase decisions (Kristiawan et al., 2021). Similarly, online shopping experience was found to have a positive and significant relationship with purchase decisions among millennial consumers in Jakarta (Rahmayanti, 2020).

More recent research also supports the relevance of online shopping experiences in digital purchasing behavior. The online shopping experience was found to contribute to future purchase intentions among online consumers, indicating that consumers' accumulated experience may be associated with subsequent purchasing responses (Saha et al., 2023). In addition, several dimensions of the digital shopping experience, including website aesthetics, accessibility, trust, price offerings, security, delivery, and quality, were found to be positively associated with digital purchase decisions (Patro, 2023).

However, previous studies have predominantly examined online shopping experiences as predictors of purchase decisions or purchase intentions using regression or structural equation modeling. Limited evidence is available on whether consumers with different levels of previous online shopping experience demonstrate significantly different purchase-decision scores. This distinction is important because the present study classifies respondents according to their previous online shopping experience and compares their purchase decision scores rather than estimating the causal effect of experience.

This issue is particularly relevant to smartphone purchases because smartphones are relatively high-involvement products that require consumers to search for information, compare alternatives, evaluate sellers, and consider prices and product benefits before making a purchase. Therefore, consumers with different levels of online shopping experience may demonstrate different patterns in evaluating and deciding

on smartphone purchases through e-commerce platforms.

Based on the theoretical argument and empirical evidence regarding the role of previous online shopping experience in consumer purchasing behavior, the following hypothesis is proposed:

H8: The online shopping experience in e-commerce transactions significantly affects online purchase decisions.

3. RESEARCH METHOD

This study employed a quantitative research approach using a survey method to examine the differences in consumer trust and online purchase decisions across demographic characteristics in e-commerce. This study used a cross-sectional design and analyzed primary survey data using descriptive statistics, independent-samples t-tests, and one-way analysis of variance (ANOVA).

The population consisted of students from private universities in Jakarta Province who had experience purchasing smartphones through e-commerce platforms. Students were selected because they represent consumers who are familiar with digital technologies and online transactions. The inclusion criteria were as follows: (1) currently enrolled at a private university in Jakarta Province; (2) having purchased a smartphone through an e-commerce platform; and (3) willingness to complete the questionnaire.

This study used a combination of proportionate stratified and convenience sampling. The sampling frame consisted of 29 large private higher education institutions (PTS) in Jakarta Province, distributed across five administrative areas: Central Jakarta, South Jakarta, West Jakarta, East Jakarta, and North Jakarta. Large PTS were defined as private higher education institutions with at least 3,000 active students in the 2024/2025 academic year, based on data obtained from the Higher Education Database (PDDIKTI) of the Ministry of Higher Education, Science, and Technology (Kemdiktisaintek). The selected institutions represented the five administrative areas of Jakarta Province.

The exact number of students who met all individual inclusion criteria was unknown; the minimum sample size was determined using the Lemeshow formula for an unknown population:

$$n = Z^2P(1-P)/d^2 \dots\dots\dots(1)$$

Using a 95% confidence level ($Z = 1.96$), $P = 0.50$, and a 5% margin of error ($d = 0.05$), the calculation yielded $n = 384.16$. The minimum sample size was therefore rounded up to 385 respondents.

Sample allocation was conducted in two stages. First, the total sample of 385 respondents was distributed across the five administrative areas based on the number of eligible PTS in each region. The allocation was calculated using the following formula:

$$n_k = (U_k / U) \times 385 \dots\dots\dots(2)$$

where n_k represents the sample allocated to an administrative area, U_k represents the number of eligible PTS in that area, and U represents the total number of eligible PTS (29 institutions) in the country. Based on this calculation and the proportional allocation presented in Table 1, 93 respondents were allocated to Central Jakarta (7 PTS), 133 to South Jakarta (10 PTS), 53 to West Jakarta (4 PTS), 93 to North Jakarta (7 PTS), and 13 to East Jakarta (1 PTS), resulting in a total of 385 respondents in the study.

Second, within each administrative area, the allocated sample was distributed proportionally among the PTS based on the number of active students enrolled in each institution during the 2024/2025 academic year. The formula used was:

$$n_i = (N_i / N_k) \times n_k \dots\dots\dots(3)$$

where n_i represents the number of respondents allocated to a particular PTS; N_i represents the number of active students in that PTS; N_k represents the total number of active students in all selected PTS within the respective administrative area; and n_k represents the sample allocated to that administrative area.

For example, in Central Jakarta, seven PTS were included with a total of 79,667 active students, and 93 respondents were allocated to the area. The 93 respondents were subsequently distributed among the seven PTS according to the proportion of students enrolled in each institution. The same procedure was applied to the other four administrative areas. Institutional student data were obtained from PDDIKTI and processed by the researcher.

After proportional allocation was determined, individual respondents were recruited using convenience sampling. Respondents were eligible if they were active students at the selected PTS and had

purchased a new smartphone online through an e-commerce platform at least once. The questionnaire was distributed online through Google Forms and disseminated through WhatsApp. Thus, stratification and proportional allocation were used to determine the distribution of the sample across PTS, while convenience sampling was used to recruit eligible individual respondents within each predetermined institutional stratum. The distribution of the selected PTS and the proportional allocation of the 385 respondents are presented in Table 1.

Table 1. Distribution of Private Universities and Respondents by Campus Location

Campus Location	Number of Private Universities	Proportion	Respondents
Central Jakarta	7	24.14%	93
South Jakarta	10	34.48%	133
West Jakarta	4	13.79%	53
North Jakarta	7	24.14%	93
East Jakarta	1	3.45%	13
Total	29	100%	385

Table 1 shows the distribution of the 29 selected private higher education institutions across five administrative areas in Jakarta Province. South Jakarta had the largest proportion, with 10 institutions (34.48%), followed by Central and North Jakarta, each with seven institutions (24.14%) and 93 respondents. West Jakarta comprised four institutions (13.79%), and East Jakarta had one institution (3.45%) and 13 respondents. In total, the proportional distribution resulted in 385 respondents across the five administrative areas.

Data were collected using a structured online questionnaire distributed through Google Forms and shared via WhatsApp Messenger. All responses were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Demographic and product-related questions were included to describe the respondents and the smartphone purchases represented in the sample.

Consumer trust (CTS) was operationalized by synthesizing and adapting established trust measures from (Mayer, Roger C; Davis, James H; Schoorman, 1995) and (Yee & Yeung, 2010). The construct comprises five dimensions: ability, integrity, benevolence, willingness to depend, and competence, which reflect consumers' perceptions of the capability, reliability, integrity, and good intentions of e-commerce vendors.

E-commerce purchase decision (EPD) was measured using six dimensions adapted to the context of smartphone purchases through e-commerce platforms: information search, benefit association, purchase reason, distributor choice, purchase timing, and buying habits. The selection of these dimensions was informed by the purchasing-decision literature summarized by (Yulianingsih et al., 2023), which identifies information search, association benefits, action because of product superiority, choice of dealer, habits in buying products, and time of purchase as dimensions of purchasing decisions.

Specifically, information search refers to consumers' activities in seeking, researching, and evaluating relevant product information before making a purchase (Firmasyah, 2018). Firmansyah explains consumer behavior as a process closely related to purchasing, including activities of searching, researching, and evaluating products and services. The purchase decision process also includes information search as one of the stages preceding the final purchase decision. Benefit association refers to consumers' association of a product with the benefits or value expected from the purchase, while purchase reason reflects the rationale underlying consumers' selection of a product, including perceived product superiority. Distributor choice refers to consumers' selection of the seller or distributor from which the product is purchased. Purchase timing refers to consumers' decision regarding when to make a purchase, while buying habits represent established patterns in purchasing products. These dimensions are consistent with the purchasing-decision dimensions synthesized by Yulianingsih et al. (Yulianingsih et al., 2023), particularly association benefits, action because of product superiority, choice of dealer, habits in buying products, and time of purchase.

Subsequently, the six dimensions were adapted to the context of smartphone purchases through e-commerce platforms while maintaining their original conceptual meaning. In this study, information search captures consumers' efforts to obtain product-related information before purchasing; benefit association reflects the benefits consumers associate with the smartphone; purchase reason represents the rationale for selecting the smartphone; distributor choice concerns the selection of the seller or distributor; purchase timing concerns when the purchase is made; and buying habits reflect consumers' established purchasing patterns. The conceptual foundation of the consumer purchase-decision process is also supported by

(Firmasyah, 2018), whose work specifically discusses consumer decision-making and the stages of purchasing decisions.

The demographic variables analyzed were sex, age, monthly expenditure, and online shopping experience. Information on smartphone brand and purchase price was also collected to provide descriptive context regarding the purchasing characteristics of the respondents.

The data were analyzed using descriptive and inferential statistics. Descriptive statistics included frequencies, percentages, and mean scores. The validity of the questionnaire items was assessed using Pearson product-moment correlations, while internal consistency was assessed using Cronbach's alpha. Independent-samples t-tests were used for binary grouping variables, while one-way ANOVA was used for grouping variables with more than two categories. Statistical significance was assessed at $p \leq 0.05$, and all analyses were conducted using SPSS version 26.

Prior to the main analysis, the questionnaire was evaluated for its validity and reliability. An item was considered valid when the calculated Pearson correlation exceeded the critical r-value, while Cronbach's alpha values above 0.60 were considered to indicate acceptable internal consistency (Ghozali, 2016).

Accordingly, independent-samples t-tests were used to compare consumer trust and online purchase decisions by gender and online shopping experience, as each of these variables contained two categories. One-way ANOVA was used for age and monthly expenditure, which contained more than two categories. This specification made the statistical procedure consistent with the number of groups in each categorical variable.

4. DATA ANALYSIS AND DISCUSSION

4.1. Characteristics of Respondents

Table 2 presents the demographic profiles of the respondents who participated in this study. The respondents consisted of 385 students from private universities in Jakarta Province who had experience purchasing smartphones through e-commerce platforms.

Based on gender composition, female respondents represented 52.7% of the sample, while male respondents accounted for 47.3%, indicating relatively balanced participation between the two groups. This distribution suggests that both male and female students are actively involved in online purchasing activities on e-commerce platforms.

In terms of age distribution, the largest proportion of respondents fell within the 20–22 years age group, followed by those aged 17–19, 23–25, and 26–28 years. This age structure reflects the dominance of young consumers, who are highly accustomed to using digital technologies and engaging in online shopping activities.

Regarding monthly expenditure, most respondents reported spending between IDR 2,000,001 and IDR 3,000,000 per month, indicating a moderate financial capacity among student consumers. This finding suggests that students constitute an important consumer segment in the e-commerce market, particularly for technology-related products, such as smartphones.

Furthermore, in terms of online shopping experience, most respondents indicated that they had purchased smartphones through e-commerce platforms more than once. This indicates that most participants were already familiar with the procedures of online transactions and had prior experience interacting with e-commerce platforms.

Overall, the demographic characteristics of the respondents represent digital native consumers who frequently interact with digital platforms and online marketplaces, making them an appropriate group for examining consumer trust and online purchase decisions in the e-commerce context. Table 2 presents the demographic characteristics of 385 respondents, including gender, age, monthly expenditure, and online shopping experience.

Table 2 presents the demographic characteristics of the 385 respondents, including gender, age, monthly expenditure, and online shopping experience. Overall, the demographic characteristics of the respondents represent digital native consumers who frequently interact with digital platforms and online marketplaces, making them an appropriate group for examining consumer trust and online purchase decisions in the e-commerce context. In addition to the respondents' demographic characteristics, information on the smartphones purchased through e-commerce was also collected to provide a clearer description of the purchasing context. The study did not restrict respondents to a particular smartphone brand or type, allowing all brands and types to be included. The purchase price was recorded using predefined price ranges.

These characteristics are presented descriptively and are not treated as research variables or sampling criteria. The distribution of smartphone brands and purchase price ranges is presented in Table 3.

Table 2. Characteristics of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	182	47.3%
	Female	203	52.7%
Age	17–19 years	46	11.9%
	20–22 years	173	44.9%
	23–25 years	113	29.4%
	26–28 years	53	13.8%
	< IDR 1,000,000	6	1.6%
Monthly Expenditure	IDR 1,000,000–2,000,000	48	12.5%
	IDR 2,000,001–3,000,000	167	43.4%
	IDR 3,000,001–4,000,000	104	27.0%
	> IDR 4,000,000	60	15.6%
Online Shopping Experience	1 time	244	63.4%
	More than 1 time	141	36.6%

Table 3. Characteristics of Smartphone Purchases

Characteristics	Category	Frequency	Percentage
Smartphone Brands	Samsung	90	21.03%
	Oppo	128	29.91%
	iPhone	126	29.44%
	Realme	76	17.76%
	Others (Vivo, Infinix, Poco, Techno)	8	1.87%
Smartphone Purchase Price Range	Rp.1.000.000,- -Rp.3.000.000,-	64	16.62%
	Rp.3.000.001,- -Rp.5.000.000,-	126	32.73%
	Rp.5.000.001,- -Rp.7.000.000,-	115	29.87%
	Rp.7.000.001,- -Rp.10.000.000,-	61	15.84%
	> Rp.10.000.000,-	19	4.94%

Table 3 presents the respondents' smartphone purchase characteristics. The study did not restrict respondents to a specific smartphone brand or type, and they were allowed to select more than one brand. Oppo accounted for the largest share of brand responses (29.91%), followed by iPhone (29.44%), Samsung (21.03%), Realme (17.76%), and other brands (1.87%). Because multiple responses were permitted, the total number of brand responses was 428, exceeding the 385 respondents in the survey. Regarding purchase price, the largest proportion of respondents purchased smartphones priced at IDR 3,000,001–5,000,000 (32.73%), followed by those priced at IDR 5,000,001–7,000,000 (29.87%).

4.2. Validity Test Result

Table 4 presents the results of the validity tests for all questionnaire items. The validity test was conducted using Pearson's product-moment correlation with a significance level of $\alpha = 0.05$ and $r\text{-table} = 0.100$ ($df = 383$). An item is considered valid if the correlation coefficient ($r\text{-count}$) exceeds the $r\text{-table}$ value.

The results indicate that all consumer trust (CTS) indicators have correlation coefficients ranging from 0.453 to 0.756, while the e-commerce purchase decision (EPD) indicators range from 0.196 to 0.751. Because all $r\text{-count}$ values were greater than the $r\text{-table}$ value, all 25 questionnaire items (10 CTS indicators and 15 EPD indicators) were considered valid and suitable for further analysis.

4.3. Reliability Test Result

A reliability test was conducted using Cronbach's alpha to assess the internal consistency of the measurement instruments. An instrument is considered reliable when the Cronbach's alpha value exceeds 0.60 (Ghozali, 2016).

As shown in Table 5, the consumer trust (CTS) variable obtained a Cronbach's alpha value of 0.764, while the e-commerce purchase decision (EPD) variable obtained a value of 0.746. Since both values are above

0.60, the instruments used to measure the variables are considered reliable and suitable for further analysis

Table 4. Validity Test Result

Indicators	Consumer Trust	E-Commerce Purchase Decision
CTS1	0.453	
CTS2	0.619	
CTS3	0.598	
CTS4	0.668	
CTS5	0.741	
CTS6	0.675	
CTS7	0.729	
CTS8	0.719	
CTS9	0.756	
CTS10	0.697	
EPD1		0.550
EPD2		0.590
EPD3		0.524
EPD4		0.653
EPD5		0.751
EPD6		0.697
EPD7		0.694
EPD8		0.702
EPD9		0.718
EPD10		0.680
EPD11		0.661
EPD12		0.646
EPD13		0.740
EPD14		0.196
EPD15		0.337

Table 5. Reliability Test Result

Variable	Cronbach's alpha
Consumer Trust	0.764
E-Commerce Purchase Decision	0.746

4.4. Results of Difference Tests

Independent-samples t-tests and one-way ANOVA were conducted to examine differences in consumer trust and online purchase decisions across the selected consumer characteristics. An independent-samples t-test was conducted to examine whether consumer trust (CTS) and e-commerce purchase decisions (EPD) differed significantly between male and female respondents. The analysis was performed at a 5% significance level ($\alpha = 0.05$). The results of the independent-samples t-test are presented in Table 6.

Table 6. Independent-Samples t-Test for Gender

Variable	Gender	N	Mean	Std. Dev	t	Sig
Consumer Trust	Male	182	45.90	3.365	-.149	0.882 ^{ns*}
	Female	203	45.95	3.252		
E-Commerce Purchase Decision	Male	182	67.07	4.671	-.188	0.851 ^{ns*}
	Female	203	67.16	4.892		

Note: $p \leq 0.05$; ns = not significant.

The results of the independent samples t-test based on gender are presented in Table 6. The mean consumer trust score was 45.90 (SD = 3.365) for male respondents and 45.95 (SD = 3.252) for female respondents. Levene's test indicated that the variances between the two groups were not significantly different ($F = 0.325$, $p = 0.569$); therefore, the equal variances assumed result was used. The t-test showed no statistically significant difference in consumer trust between male and female respondents ($t = -0.149$, $df = 383$, $p = 0.882$). Therefore, H1 is rejected.

Similarly, the mean e-commerce purchase decision score was 67.07 (SD = 4.671) for male respondents and 67.16 (SD = 4.892) for female respondents. Levene's test indicated that the variances between the two

groups were not significantly different ($F = 1.593$, $p = 0.208$). The t-test showed no statistically significant difference in e-commerce purchase decisions between male and female respondents ($t = -0.188$, $df = 383$, $p = 0.851$). Therefore, H2 is rejected in this study.

A one-way analysis of variance (ANOVA) was conducted to examine whether consumer trust (CTS) and e-commerce purchase decisions (EPD) differed significantly across respondents' age groups. The analysis compared four age categories: 17-19 years, 20-22 years, 23-25 years, and 26-28 years, using a significance level of 0.05. The results of the one-way ANOVA are presented in Table 7.

Table 7. One-Way ANOVA Test for Age

Variable	Age	N	Mean	Std. Dev	F Value	Sig
Consumer Trust	17-19 Years Old	46	45.02	3.059	1.581	.194
	20-22 Years Old	173	45.98	3.230		
	23-25 Years Old	113	46.26	3.375		
	26-28 Years Old	53	45.79	3.516		
E-Commerce Purchase Decision	17-19 Years Old	46	65.65	4.537	1.665	.174
	20-22 Years Old	173	67.37	4.848		
	23-25 Years Old	113	67.30	4.846		
	26-28 Years Old	53	67.15	4.542		

The results of the one-way ANOVA based on age groups are presented in Table 7. The analysis showed no statistically significant difference in consumer trust across age groups ($F = 1.581$, $p = 0.194$). The mean consumer trust scores ranged from 45.02 among respondents aged 17-19 years to 46.26 among those aged 23-25 years. Although the mean scores varied slightly across age groups, the differences were not statistically significant. Therefore, H3 is rejected.

Similarly, no statistically significant difference was found in e-commerce purchase decisions across age groups ($F = 1.665$, $p = 0.174$). The mean purchase-decision scores ranged from 65.65 among respondents aged 17-19 years to 67.37 among those aged 20-22 years. Despite these differences in mean scores, age did not significantly differentiate online purchase decisions. Therefore, H4 is rejected.

These findings suggest that age has limited discriminatory value for consumer trust and online purchase decisions within the present sample. The relatively homogeneous educational and digital environment of the university students may contribute to similar levels of familiarity with e-commerce platforms and online purchasing processes. However, this explanation was not directly tested in the present study.

A one-way analysis of variance (ANOVA) was conducted to examine whether consumer trust (CTS) and e-commerce purchase decisions (EPD) differed significantly across respondents' monthly expenditure groups. The analysis compared five expenditure categories, ranging from less than IDR 1,000,000 to more than IDR 4,000,000, using a significance level of 0.05. The results of the one-way ANOVA are presented in Table 8.

Table 8. One-Way ANOVA Test for Monthly Expenditure

Variable	Monthly Expenditure	N	Mean	Std. Dev	F Value	Sig
Consumer Trust	<1.000.000	6	47.83	2.317	1.752	0.138
	1.000.000-2.000.000	48	45.90	3.211		
	2.000.001-3.000.000	167	45.60	3.185		
	3.000.001-4.000.000	104	45.89	3.566		
	> 4.000.000	60	46.70	3.201		
E-Commerce Purchase Decision	<1.000.000	6	67.83	3.869	0.425	0.791
	1.000.000-2.000.000	48	67.63	4.205		
	2.000.001-3.000.000	167	66.84	4.812		
	3.000.001-4.000.000	104	67.03	5.194		
	> 4.000.000	60	67.53	4.542		

The one-way ANOVA results presented in Table 8 show no statistically significant difference in consumer trust (CTS) across expenditure groups ($F = 1.752$, $p = 0.138$). Similarly, the analysis of e-commerce purchase decisions (EPD) reveals no statistically significant differences across expenditure groups ($F = 0.425$, $p = 0.791$).

These findings indicate that there are no statistically significant differences in consumer trust or

online purchase decisions across monthly expenditure groups. This may be explained by the relatively similar economic conditions of the respondents, who were predominantly university students. Therefore, H5 and H6 are rejected.

An independent-samples t-test was conducted to examine whether consumer trust (CTS) and e-commerce purchase decisions (EPD) differed significantly based on respondents' online shopping experience. The analysis compared respondents who had purchased smartphones once with those who had purchased more than once, using a significance level of 0.05. The results of the independent-samples t-test are presented in Table 9.

Table 9. Independent-Samples t-Test for Online Shopping Experience

Variable	Online Shopping Experience	N	Mean	Std. Dev.	t	Sig.
Consumer Trust	1 time	244	46.11	3.300	1.477	0.141
	More than 1 time	141	45.60	3.291		
E-Commerce Purchase Decision	1 time	244	67.49	4.628	2.023	0.044
	More than 1 time	141	66.47	4.783		

The results of the independent-samples t-test based on online shopping experience are presented in Table 9. The analysis shows no statistically significant difference in consumer trust (CTS) between respondents who had purchased smartphones once and those who had purchased them more than once ($t = 1.477$, $df = 383$, $p = 0.141$). The mean consumer trust score was 46.11 ($SD = 3.300$) for respondents who had purchased smartphones once and 45.60 ($SD = 3.291$) for those who had purchased them more than once. Because the significance value is greater than 0.05, H7 is rejected.

In contrast, the results show a statistically significant difference in e-commerce purchase decisions (EPD) based on the online shopping experience ($t = 2.023$, $df = 383$, $p = 0.044$). Respondents who had purchased smartphones once reported a higher mean purchase decision score ($M = 67.49$, $SD = 4.628$) than those who had purchased more than once ($M = 66.47$, $SD = 4.783$), with a mean difference of 1.02 points. Although the difference is statistically significant, the relatively small mean difference indicates that the difference between the two experience groups is modest and not practically significant. Therefore, H8 is accepted in this study.

5. Discussion

The results show no statistically significant difference in consumer trust between male and female respondents ($p = 0.882$). The mean scores indicate that male and female respondents reported relatively similar levels of trust in e-commerce platforms. This finding suggests that gender has limited discriminatory value for consumer trust in the present sample. Previous studies have shown that trust in online environments is associated with perceptions of product quality, service quality, institutional mechanisms, and system reliability (Gefen, 2000) (Kim et al., 2008) (Haekal, 2023) (Muharam et al., 2021) (Wahyu Iriandy, Sufrin Hannan, 2024). These factors are discussed as possible explanations based on the previous literature rather than direct determinants tested in the present study.

Similarly, there was no statistically significant difference in e-commerce purchase decisions between male and female respondents ($p = 0.851$). The findings indicate that male and female respondents reported relatively similar purchase-decision scores when purchasing smartphones through e-commerce platforms. This result suggests that gender had limited discriminatory value for online purchase decisions within the present sample. Previous research has indicated that online purchasing behavior may be associated with factors such as information availability, website quality, perceived service quality, and consumer trust (Syachrony et al., 2023) (Hanaysha et al., 2025). These factors may provide possible explanations for consumer decision-making in e-commerce, although they were not directly tested in this study.

The results show no statistically significant difference in consumer trust across age groups ($F = 1.581$, $p = 0.194$). Similarly, no statistically significant difference was found in e-commerce purchase decisions across age groups ($F = 1.665$, $p = 0.174$). These findings suggest that age has limited discriminatory value for consumer trust and online purchase decisions within the present sample.

One possible explanation is the relatively homogeneous characteristics of the respondents, who were university students with similar educational and digital environments. Although the respondents belonged to different age groups, their exposure to digital technologies and e-commerce platforms may have been similar. Such similarities may reduce the observable differences in trust perceptions and purchase decisions across age groups.

The technology acceptance model (TAM) provides a possible theoretical perspective for understanding why users with similar perceptions of technology usefulness and ease of use may demonstrate relatively similar behavioral responses. However, because perceived usefulness and perceived ease of use were not directly tested in this study, TAM should be considered as a supporting theoretical perspective rather than an empirical explanation of the present findings. Previous studies have also suggested that online trust may be associated with platform-related factors, including service quality and reliability (Pasaribu et al., 2022) (Gani & Maulianza, 2025) (Ahmad Algi Saputra et al., 2022).

Furthermore, there is no statistically significant difference in consumer trust across monthly-expenditure groups ($F = 1.752$, $p = 0.138$). Similarly, no statistically significant difference is found in e-commerce purchase decisions across expenditure groups ($F = 0.425$, $p = 0.791$). These findings indicate that monthly expenditure has limited discriminatory value for consumer trust and purchase decisions within the present sample.

The absence of statistically significant differences may be related to the relatively similar economic and educational contexts of the respondents, who were predominantly university students. In addition, students may rely on similar sources of information, such as product specifications, price comparisons, online reviews, and seller ratings, when evaluating smartphone purchases. However, these possible explanations were not directly tested in this study. Previous research has highlighted the importance of information quality, transaction security, and privacy protection in online consumer behavior (Tuurmaida, 2025) (Novi Julianti & Helmy Ivan Taruna, 2024).

Finally, online shopping experience did not show a statistically significant difference in consumer trust ($p = 0.141$), whereas a statistically significant difference was found in e-commerce purchase decisions ($p = 0.044$). Respondents who had purchased smartphones once reported a higher mean purchase-decision score ($M = 67.49$, $SD = 4.628$) than those who had purchased more than once ($M = 66.47$, $SD = 4.783$). The mean difference of 1.02 points is relatively small, and the standardized effect size is also small (Cohen's $d \approx 0.22$). Therefore, although the difference is statistically significant, its practical magnitude is limited.

This finding should not be interpreted as evidence that a greater shopping experience causes lower purchase-decision scores. Rather, it indicates that the two experience groups differed statistically in their observed purchase-decision scores. One possible explanation is that previous online shopping experiences may expose consumers to different levels of familiarity with platform features, seller evaluation mechanisms, and payment procedures (Azmi & Patrikha, 2021).

These findings provide a distinction between demographic and experiential characteristics in differentiating online purchasing decisions. Although gender, age, and monthly expenditure did not produce statistically significant differences in online purchase decisions, online shopping experience showed a statistically significant difference between the two experience groups. This suggests that within the relatively homogeneous population of university students examined in this study, experiential characteristics may provide additional discriminatory value beyond basic demographic characteristics when differentiating online purchase decisions.

However, the small effect size (Cohen's $d \approx 0.22$) indicates that this discriminatory value is modest in size. Therefore, the online shopping experience should not be regarded as a strong determinant of online purchase decisions or as a standalone basis for consumer segmentation. Rather, it may serve as a supplementary characteristic for distinguishing purchase decision patterns among student consumers. This finding provides a nuanced perspective on e-commerce consumer segmentation by considering experiential and demographic characteristics.

6. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

This study examines whether consumer trust and online purchase decisions differ across gender, age, monthly expenditure, and online shopping experience in smartphone purchases through e-commerce platforms. Based on survey data collected from 385 students from private universities in Jakarta Province, the findings provide evidence regarding the extent to which these characteristics differentiate consumer responses in a relatively homogeneous university student population.

The findings show no statistically significant differences in consumer trust or online purchase decisions based on gender, age, or monthly expenditure. These results indicate that these characteristics have limited discriminatory value for consumer trust and online purchase decisions in the present sample. The findings should not be interpreted as evidence that demographic characteristics are universally irrelevant to digital consumer behavior. Rather, they suggest that differences in gender, age, and monthly expenditure may not be sufficient to distinguish consumer responses among university students who share relatively

similar educational and digital environments.

The online shopping experience presents a different pattern. The results show no statistically significant difference in consumer trust between respondents who had purchased smartphones once and those who had purchased more than once ($p = 0.141$). However, a statistically significant difference was found in e-commerce purchase decisions ($p = 0.044$). Respondents who had purchased smartphones once reported a higher mean purchase-decision score ($M = 67.49, SD = 4.628$) than those who had purchased more than once ($M = 66.47, SD = 4.783$). Nevertheless, the mean difference of 1.02 points is relatively small, with a Cohen's d of approximately 0.22. Therefore, although the difference is statistically significant, its practical magnitude is limited. This finding demonstrates a difference between experience groups rather than evidence that greater shopping experience causes lower purchase-decision scores.

From a theoretical perspective, this study contributes to the literature on digital consumer behavior by providing empirical evidence that demographic characteristics may have limited discriminatory value within a relatively homogeneous population of digitally familiar university students. This study also demonstrates that online shopping experience may distinguish purchase-decision scores even when it does not distinguish consumer trust. This finding provides a more nuanced understanding of demographic and experiential segmentation in e-commerce consumer research, particularly in the context of smartphone purchases.

From a managerial perspective, the findings suggest that e-commerce platforms and online sellers should be cautious about relying exclusively on gender, age, or monthly expenditure when segmenting university student consumers. Online shopping experience may be considered as a supplementary segmentation characteristic, particularly when developing customer-journey strategies for consumers with different levels of familiarity with e-commerce transactions. Platform security, information transparency, product information, seller ratings, and customer reviews may also remain important considerations in e-commerce management based on previous literature; however, these factors were not directly tested in the present study and therefore should not be interpreted as direct empirical determinants of the findings.

This study had several limitations. First, the respondents were limited to students from private universities in Jakarta, which may limit the generalizability of the findings to broader consumer populations. Second, this study focused specifically on smartphone purchases through e-commerce platforms, and consumer responses may differ for other product categories with different levels of involvement or perceived risk. Third, the recruitment process involved convenience sampling within proportionally allocated strata, which may have limited the representativeness of the sample. Fourth, the EPD14 indicator showed a relatively low item-level correlation ($r = 0.196$), although the overall EPD construct demonstrated acceptable internal consistency. Finally, statistical analysis identifies group differences but does not establish causal relationships.

Future studies should involve more diverse respondent groups from different demographic backgrounds, educational institutions, and geographical regions. Future studies may also examine additional factors, such as perceived risk, digital literacy, platform usability, social influence, transaction security, and information quality, to investigate whether these factors may help explain differences in consumer trust and online purchase decisions that are not captured by demographic and experiential characteristics. Comparative studies across different product categories may also provide deeper insights into the conditions under which demographic and experiential characteristics differentiate consumer responses in digital purchasing contexts.

REFERENCES

- Adel, N. (2024). The impact of digital literacy and technology adoption on financial inclusion in Africa, Asia, and Latin America. *Heliyon*, 10(24), 1-. <https://doi.org/10.1016/j.heliyon.2024.e40951>
- Alfanur, F., & Kadono, Y. (2022). The effects of gender and age on factors that influence purchase intentions and behaviours of e-commerce consumers in Indonesia. *International Journal Innovation and Learning*, 31(4), 474–505. <https://doi.org/10.1504/IJIL.2022.123178>
- Amarullah, D., Handriana, T., & Maharudin, A. (2022). EWOM Credibility, Trust, Perceived Risk, and Purchase Intention in The Context of E-Commerce: Moderating Role of Online Shopping Experience. *Jurnal Ekonomi Bisnis Dan Keirausahaan (JEBIK)*, 11(1), 61–83. <https://doi.org/10.26418/jebik.v11i1.50594>
- Catană, Ștefan A., Imbrișcă, C. I., & Veith, C. (2025). Understanding Generation Z's Purchasing Behaviour on Online Marketplaces: A TAM-Based Approach. *Journal of Theoretical and Applied Electronic Commerce Research*, 20(4), 1–21. <https://doi.org/10.3390/jtaer20040260>
- Chen, T., Samaranayake, P., Cen, X. Y., Qi, M., & Lan, Y. C. (2022). The Impact of Online Reviews on Consumers'

- Purchasing Decisions: Evidence From an Eye-Tracking Study. *Frontiers in Psychology*, 13(June). <https://doi.org/10.3389/fpsyg.2022.865702>
- Chiguvu, D., Zhou, N., Molelekwane, O., & Mogae, M. (2025). The Impact of Influencer Marketing on Consumer Buyer Behavior. *International Review of Management and Marketing* , 15(5), 297–308. <https://doi.org/10.32479/irmm.18759>
- Dawam, A., Subroto, W. T., & Sakti, N. C. (2025). Changes in Consumer Behavior of Millennials and Generation Z towards Purchasing Consumer Goods in the Digital Era in Bator Village. *International Journal of Research and Innovation in Social Science (IJRISS)*, iX(1), 884–897. <https://doi.org/10.47772/IJRISS.2025.9010073>
- Dhawan, H., & Garga, P. (2025). Studies Management and Finance Economics, of Journal The Demographic Effect on Consumer Buying Behaviour: Evidence from Online and Offline Electronics Shopping. *Journal of Economics, Finance and Management Studies*, 8(04), 2492–2506. <https://doi.org/10.47191/jefms/v8>
- Erlangga, H., Setiawati, T., Riadi, F., Hindarsah, I., & Riani, D. (2024). Consumer Behavior in The Digital Age: A Qualitative Analysis of Online Shopping Patterns in Indonesia. *Majalah Ilmiah Bijak*, 21(2), 424–432. <https://doi.org/10.31334/bijak.v21i2.4334>
- Faqih, K. M. S. (2022). Internet shopping in the Covid-19 era: Investigating the role of perceived risk, anxiety, gender, culture, and trust in the consumers' purchasing behavior from a developing country context. *Technology in Society*, 70(C). <https://doi.org/10.1016/j.techsoc.2022.101992>
- Farkas, M. F., Gholampour, A., Bouzari, P., Jarghooiyan, H., & Ebrahimi, P. (2021). How gender and age can affect consumer purchase behavior? Evidence from A microeconomic perspective from Hungary. *AD-Minister*, 39(2), 25–46. <https://doi.org/10.17230/Ad-minister.39.2>
- Firdaus Firdaus, Martini Martini, Sri Sulistyaningsih , & Meizar Effendi . (2023). The Role Of Consumer Trust As An Intervening Variable In Purchasing Decisions In Lazada E-Commerce: A Study Of Indonesian Society. *International Conference on Digital Advance Tourism, Management and Technology*, 1(1), 555–567. <https://doi.org/10.56910/ictmt.v1i1.125>
- Firmasyah, M. A. (2018). *Perilaku Konsumen*. Deepublish, Yogyakarta, Indonesia.
- Florea, N. V., Croitoru, G., & Diaconeasa, A. A. (2025). The Impact of Integrity-Related Factors on Consumer Shopping Intention—An Interactive Marketing Approach Based on Digital Integrity Model. *Journal of Theoretical and Applied Electronic Commerce Research* , 20(4), 1–41. <https://doi.org/10.3390/jtaer20040262>
- Gobbilla, U., & Sanjana, C. (2025). A study on analysing the impact of demographic factors on purchasing decisions of consumers at Bajaj electronics. *International Journal of Advanced Engineering, Management and Science*, 11(4), 212–225. <https://doi.org/10.22161/ijaems.114.22>
- Gupta, S., Kushwaha, P. S., Badhera, U., Chatterjee, P., & Gonzalez, E. D. R. S. (2023). Identification of benefits, challenges, and pathways in E-commerce industries: An integrated two-phase decision-making model. *Sustainable Operations and Computers*, 4(June), 200–218. <https://doi.org/10.1016/j.susoc.2023.08.005>
- Hamdani, N. A., Muladi, R., & Maulani, G. A. F. (2022). Digital Marketing Impact on Consumer Decision-Making Process. *Proceedings of the 6th Global Conference on Business, Management, and Entrepreneurship (GCBME 2021)*, 657(Gcbme 2021), 153–158. <https://doi.org/10.2991/aebmr.k.220701.031>
- Handoyo, S. (2024). Purchasing in the digital age: A meta-analytical perspective on trust, risk, security, and e-WOM in e-commerce. *Heliyon*, 10(8), e29714. <https://doi.org/10.1016/j.heliyon.2024.e29714>
- Hariningsih, E., Setiawan, R. N. B., Munarsih, E., & Rahman, M. T. (2022). Perbedaan Gender dalam Persepsi Harga , Promosi , dan Online Review Produk Pakaian Erigo terhadap Niat Pembelian Online. *Valid Jurnal Ilmiah*, 20(1), 11–21. <https://doi.org/10.53512/valid.v20i1.273>
- Hartanto, N., Mani, L., Jati, M., Josephine, R., & Hidayat, Z. (2022). Factors Affecting Online Purchase Decision, Customer Satisfaction, and Brand Loyalty: An Empirical Study from Indonesia's Biggest E-Commerce. *Journal of Distribution Science*, 20(11), 33–45. <https://doi.org/10.15722/jds.20.11.202211.33>
- Hasbiah, S., & Hasdiansa, I. W. (2025). Building Consumer Trust Through Information System Integration in E-Commerce. *International Journal of Economics, Management and Accounting*, 3(1), 2988–7615. <https://doi.org/10.47353/ijema.v3i1.292>
- Herrando, C., Jimenez-martinez, J., Hoyos, M. J. M., Herrando, C., Jimenez-martinez, J., & Hoyos, M. J. M. (2019). Tell me your age and I tell you what you trust : the moderating effect of generations. *Internet Research*, 4(29), 799–817. <https://doi.org/10.1108/IntR-03-2017-0135>
- Hidayat, A., Wijaya, T., Ishak, A., & Endi Catyanadika, P. (2021). Consumer trust as the antecedent of online consumer purchase decision. *Information (Switzerland)*, 12(4), 1–10. <https://doi.org/10.3390/info12040145>
- Hipólito, F., Dias, Á., & Pereira, L. (2025). Influence of Consumer Trust, Return Policy, and Risk Perception on Satisfaction with the Online Shopping Experience. *Systems*, 13(3), 1–18. <https://doi.org/10.3390/systems13030158>
- Ikhlaash, M., & Linda, K. R. (2024). The Effect of Risk Perception and Online Trust on Purchase Intention in E-Commerce. *International Review of Management and Marketing* , 14(6), 109–118. <https://doi.org/10.32479/irmm.17111>

- Indiani, N. L. P., Amerta, I. M. S., & Sentosa, I. (2024). Exploring the moderation effect of consumers' demography in the online purchase behavior. *Cogent Business and Management*, 11(1), 1–23. <https://doi.org/10.1080/23311975.2024.2393742>
- Ingriana, A. (2024). The Influence of E-Trust on Consumer Purchasing Behavior in E-Commerce. *Jurnal Bisnis Digital Dan Ekonomi Kreatif*, 1(3), 1–16. <https://doi.org/10.1234/jumder.v1i3.26>
- Islam, S., Aziz, S., & Ahamed, T. (2026). Does Gender Affect Online Shopping Behaviour? A Quantitative Analysis. *SAGE Open*, 16(1), 1–20. <https://doi.org/10.1177/21582440261422897>
- Jeong, K., Choi, C., & Mun, H. (2026). Differences in Sports Learning by Digital Literacy Level Among Generation Z : An Application of the Unified Theory of Acceptance and Use of Technology (UTAUT) and Media Richness Theory (MRT). *Behavioral Scineces*, 16(343), 1–22. <https://doi.org/https://doi.org/10.3390/bs16030343>
- Khusaini, K., Cahya Ramdani, H., & Ambarumanti, R. (2019). The Influence of Shopping and Gender Differences on Online Shopping. *Jurnal Pendidikan Ekonomi Dan Bisnis (JPEB)*, 7(1), 22–30. <https://doi.org/10.21009/jpeb.007.1.3>
- Kotler, P., & Keller, K. L. (2016). *Marketing Management* (15th ed.). New Jersey: Pearson Pretice Hall, Inc.
- Kráľ, Š., Kráľová, L., Gavura, Š., & Bačík, R. (2025). Generational differences in the perception of e-commerce aspects: An empirical study of Slovak consumers. *Economics & Sociology*, 18(4), 116. <https://doi.org/10.14254/2071-789x.2025/18-4/6>
- Krisna, A. M. (2025). E-Commerce and Digital Economy: An Analysis of Changing Consumption Patterns and Their Impact on Economic Growth. *Oikonomia : Journal of Management Economics and Accounting*, 2(3), 123–137. <https://doi.org/10.61942/oikonomia.v2i3.359>
- Kristiawan, A., Kurniawati, K., Gunawan, I., & Yo, A. F. (2021). Pengaruh Pengalaman Berbelanja Online Terhadap Keputusan Pembelian Pelanggan (Segmen : Mahasiswa Fakultas Ekonomi Universitas Kristen Maranatha Pelanggan Shopee dan JD.ID). *Jurnal Ilmiah Manajemen Bisnis Dan Inovasi Universitas Sam Ratulangi*, 8(2), 479–492. <https://doi.org/10.35794/jmbi.v8i2.35107>
- Lăzăroiu, G., Negurita, O., Grecu, I., Grecu, G., & Mitran, P. C. M. (2020). Consumers ' Decision-Making Process on Social Commerce Platforms : Online Trust , Perceived Risk , and Purchase Intentions. *Frontiers in Psychology*, 11(May), 1–7. <https://doi.org/10.3389/fpsyg.2020.00890>
- Leonov, Y., Nakonechnyi, O., Khalimanenko, V., Nikolaiko, H., & Heraimovych, V. (2023). Analysis of the Influence of Psychological Factors on Consumer Behavior and the Decision-making Process. *Economic Affairs (New Delhi)*, 68(3), 1643–1651. <https://doi.org/10.46852/0424-2513.3.2023.29>
- Luh, N., Indiani, P., Amerta, I. M. S., & Sentosa, I. (2024). Exploring the moderation effect of consumers ' demography in the online purchase behavior. *Cogent Business & Management*, 11(1), 1–23. <https://doi.org/10.1080/23311975.2024.2393742>
- Mammen, V. A., Manohar, S. J., & Bharathi, T. (2021). Influence of age on browsing habits of consumers and the factors affecting the online purchase decisions. *International Journal Data Science*, 6(4), 310–327. <https://doi.org/10.1504/IJDS.2021.122776>
- Mayer, Roger C; Davis, James H; Schoorman, F. D. (1995). An Integrative Model of Organizational Trust A. *Academy of Management Review*, 20(3), 709–734. <https://doi.org/https://doi.org/10.2307/258792>
- Mofokeng, T. E. (2023). Antecedents of trust and customer loyalty in online shopping : The moderating effects of online shopping experience and e-shopping spending. *Heliyon*, 9(5), e16182. <https://doi.org/10.1016/j.heliyon.2023.e16182>
- Najiatusun, & Firdaus, J. (2025). The Influence of Virtual Reality on Consumer Decision-Making in Purchasing Maybelline Products. *Jurnal Ilmiah Manajemen Kesatuan*, 13(6), 5235–5246. <https://doi.org/10.37641/jimkes.v13i6.4195>
- Ngo, T. T. A., Nguyen, H. L. T., Mai, H. T. A., & Nguyen, H. P. (2025). Key determinants of online impulse buying behavior: A study from TikTok Shop users in Vietnam. *Acta Psychologica*, 260(March), 105593. <https://doi.org/10.1016/j.actpsy.2025.105593>
- Nomcharoen, M., Imprapha, N., Bungbua, P., & Noichaisin, L. (2025). Factors Affecting The Decision to Purchase Products Through Online Platforms of Burapha University Students SA KAEO Campus. *Sripatum Academic Journal*, 21(3), 1–5.
- Patro, C. S. (2023). Consumers ' Digital Shopping Experience : A Study of the Factors Influencing. *International Journal of E-Business Research*, 19(1), 1–17. <https://doi.org/10.4018/ijebr.318475>
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: Integrating trust and risk with the technology acceptance model. *International Journal of Electronic Commerce*, 7(3), 101–134. <https://doi.org/10.1080/10864415.2003.11044275>
- Petcharat, T., & Leelasanthitham, A. (2021). Heliyon A retentive consumer behavior assessment model of the online purchase decision-making process. *Heliyon*, 7(November 2020), e08169. <https://doi.org/10.1016/j.heliyon.2021.e08169>
- Pires, P. B., Santos, D., & Brito, P. Q. De. (2022). Connecting Digital Channels to Consumers ' Purchase Decision-

- Making Process in Online Stores. *Sustainability*, 2(14392), 1–21. <https://doi.org/10.3390/su142114392>
- Rahmaningtyas, A., Nurcahyani, M., Purnamasari, F., & Mendoza, R. F. (2025). Exploring the impact of customer trust, perceived risk, and user convenience on the online purchase intention of Indonesian local food specialties. *World Journal of Advanced Research and Reviews*, 28(1), 782–789. <https://doi.org/10.30574/wjarr>
- Rahmayanti, R. (2020). Pengaruh Persepsi Harga, Brand Image dan Pengalaman Belanja Online Terhadap Purchase Decision Product Fashion di Kalangan Milenial di Jakarta. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, 5(6), 617–621. <https://doi.org/10.24912/jmbk.v5i6.15086>
- Ramadhan, S. W. (2025). Analisis Pengaruh Media Sosial , Kepercayaan Konsumen , Dan Persepsi Harga Terhadap Keputusan Belanja Online Pada Siswa Kelas XI di SMK Kesehatan Surabaya. *Jurnal Ilmiah Manajemen, Ekonomi Bisnis, Kewirausahaan*, 12(2), 1595–1611. <https://doi.org/10.30640/ekonomika45.v12i2.4659>
- Ratnasari, R., Hermawan, A., & Winarno, A. (2023). The Influence of Celebrity Endorser, Brand Image and Service Quality on Purchase Decision in Tokopedia with Consumer Trust as Intervening Variables. *Journal of Applied Business, Taxation and Economics Research*, 2(6), 619–637. <https://doi.org/10.54408/jabter.v2i6.199>
- Rolando, Benedictus; Chondro, J. (2025). The Influence of Customer Reviews and Ratings on Online Purchase Decisions. *International Journal of Economics and Business Studies*, 2(1), 1–27. <https://doi.org/10.1234/ijeb.v2i1.107>
- Safitri, D., Nabila, N. I., Sari, A., & Ramelan, M. R. (2024). The role of demographics to actual purchase decision in online shopping. *Indonesian Journal of Business, Accounting and Management*, 7(1), 47–56. <https://doi.org/10.36406/ijbam.v7i01.1608>
- Saha, S. K., Duarte, P., Silva, S. C., & Zhuang, G. (2023). The Role of Online Experience in the Relationship Between Service Convenience and Future Purchase Intentions. *Jurnal of Internet Commerce*, 22(2), 244–271. <https://doi.org/10.1080/15332861.2022.204576>
- Slaton, K. (2025). Company-Controlled vs. Seller-Controlled Resale Platforms: Consumer Trust, Risk, and Purchase Intention in Circular Fashion. *Sustainability (Switzerland)*, 17(21). <https://doi.org/10.3390/su17219847>
- Sofiani, M., & Sagir, J. (2022). Pengaruh Online Shoping Experience Terhadap Loyalitas Konsumen Menggunakan Shopee Dengan Customer Trust Sebagai Variabel Intervening. *Master of Management Journal*, 11(2), 120–134. <https://doi.org/10.29303/jmm.v11i2.711>
- Sulistiyowati, T., & Husda, N. E. (2023). the Trust Factor: a Comprehensive Review of Antecedents and Their Role in Shaping Online Purchase Intentions. *Jurnal Ekonomi Dan Bisnis Airlangga*, 33(2), 229–244. <https://doi.org/10.20473/jeba.v33i22023.229-244>
- Xiong, Y. (2022). The Impact of Artificial Intelligence and Digital Economy Consumer Online Shopping Behavior on Market Changes. *Discrete Dynamics in Nature and Society*, 2022(1), 1–12. <https://doi.org/10.1155/2022/9772416>
- Yee, W. M. S., & Yeung, R. M. W. (2010). An empirical examination of the role of trust in consumer and supplier relationship of little direct contact: A structural equation modeling approach. *Journal of International Food and Agribusiness Marketing*, 22(1–2), 143–163. <https://doi.org/10.1080/08974430903373003>
- Yoon, H. S., & Occe~na, L. G. (2015). Influencing factors of trust in consumer-to-consumer electronic commerce with gender and age. *International Journal of Information Management*, 35, 352–363. <https://doi.org/10.1016/j.ijinfomgt.2015.02.003>
- Yulianingsih, Limakrisna, N., & Muharam, H. (2023). Purchasing Decisions Based on Consumer Trust in Halal Topical Cosmetic Products. *International Journal of Business and Applied Economic (IJBAE)*, 2(5), 753–770. <https://doi.org/10.55927/ijbae.v2i5.6043>