

Factors Influencing E-Hailing Service Use among Universiti Tun Hussein Onn Malaysia (UTHM) Faculty of Technology Management and Business (FPTP) Students

Surendran Arumugam¹, Fadillah Ismail^{1*}

¹ Department of Production and Operations Management, Faculty of Technology Management and Business, Universiti Tun Hussein Onn Malaysia, Batu Pahat, Johor, 86400, MALAYSIA

*Corresponding Author: fadillah@uthm.edu.my

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Abstract

E-hailing services have become an increasingly popular mode of transportation among university students in Malaysia, particularly for daily commuting. Despite their widespread use, factors influencing students' adoption of these services remain underexplored. This study aims to examine the effects of perceived usefulness, perceived ease of use, fare pricing, and safety concerns on the intention to use e-hailing services among undergraduate students at Universiti Tun Hussein Onn Malaysia (UTHM), focusing on the Faculty of Technology Management and Business (FPTP). Guided by the Technology Acceptance Model (TAM), a quantitative research design was employed, with data collected from 313 students selected through stratified random sampling. A structured questionnaire adapted from established TAM studies and validated by two experts, followed by a pilot test of 20 respondents, was used to ensure reliability and content validity. The reliability analysis indicated excellent internal consistency (Cronbach's alpha = 0.909). Statistical analysis using SPSS version 26, including descriptive statistics and Pearson correlation, revealed that perceived usefulness and ease of use significantly influence students' intention to use e-hailing services. Fare pricing and safety concerns also have meaningful effects, with a moderate negative correlation observed between fare perceptions and usage ($r = -0.412$, $n = 240$, $p = 0.001$). The findings suggest that improving app functionality, implementing enhanced safety measures, and maintaining transparent pricing could increase adoption among students. Practically, the study offers insights for e-hailing service providers to develop reliable, user-friendly, and safe platforms with fair pricing. Academically, it contributes to the literature on technology adoption among youth, highlighting the roles of usability, safety, and cost in shaping behavioral intentions. Future research could expand to other faculties or institutions to improve generalizability.

1. Introduction

E-hailing services have become an increasingly important mode of transportation among university students in Malaysia, particularly for daily academic and personal travel. The rapid growth of mobile-based platforms such as Grab, inDrive, and Maxim has provided students with flexible and on-demand transportation options, especially

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in areas where public transport services are limited or inconsistent (Teo *et al.*, 2018; Yan *et al.*, 2020). The widespread use of smartphones and mobile applications has further accelerated the adoption of e-hailing services among young adults. Within the university environment, students frequently depend on e-hailing services to commute between campuses, residential areas, and nearby commercial locations. Previous studies have shown that students value e-hailing services due to their convenience, time efficiency, and perceived safety compared to traditional public transportation (Ubaidillah *et al.*, 2019). However, despite these advantages, several challenges remain, including concerns related to application reliability, personal safety, and fare variability, which may influence students' willingness to use such services consistently (Yunoh & Ibrahim, 2020). The Technology Acceptance Model (TAM), introduced by Davis (1989), provides a well-established theoretical foundation for understanding users' acceptance of technology-based services. TAM emphasizes perceived usefulness and perceived ease of use as key determinants of behavioral intention toward technology adoption. In the context of e-hailing services, these constructs can be extended to include practical factors such as app functionality, service reliability, safety perceptions, and fare pricing, all of which play a significant role in shaping users' adoption behavior (Venkatesh & Bala, 2008). Although previous research has examined e-hailing usage among the general population, limited studies have specifically focused on university students using a structured theoretical model such as TAM, particularly within the Malaysian university context. University students represent a unique user group due to their financial constraints, safety concerns, and frequent mobility needs. Therefore, this study aims to examine the influence of app functionality and service reliability, safety concerns, and fare pricing on the usage of e-hailing services among undergraduate students at Universiti Tun Hussein Onn Malaysia (UTHM), thereby contributing empirical insights for both service providers and university administrators.

2. Literature Review

2.1 E-Hailing Service

E-hailing services have become increasingly popular due to their convenience, accessibility, and technology-driven features. However, previous studies indicate that users' acceptance and continued usage of such services are influenced by several factors, including application functionality, safety perceptions, and fare pricing (Ahmad & Marzuki, 2020; Arumugam *et al.*, 2020). Many past studies have employed the Technology Acceptance Model (TAM) to explain individuals' acceptance of technology-based services. TAM suggests that users' perceptions of usefulness and ease of use play a crucial role in determining technology adoption behavior (Davis, 1989). In the context of e-hailing services, these perceptions are often reflected through app functionality and service reliability, which affect users' confidence and satisfaction when using the service. Previous research has also highlighted safety and security as major concerns, particularly among students and young users. Issues such as driver behavior, personal safety, and trust in the platform have been shown to significantly influence users' willingness to use e-hailing services (Ahmad & Marzuki, 2020). Additionally, fare pricing has been identified as a critical factor, especially for students who are highly price-sensitive and depend on limited financial resources (Arumugama *et al.*, 2020). Although these studies provide valuable insights, most of them focus on the general population or urban commuters. There is a lack of empirical research specifically examining university students in Malaysian public universities, particularly at Universiti Tun Hussein Onn Malaysia (UTHM). Students at UTHM may experience different mobility needs, financial constraints, and safety perceptions compared to users in major urban areas. Therefore, this study seeks to address this gap by examining how app functionality and reliability, safety concerns, and fare pricing influence the use of e-hailing services among FPTP students at UTHM. This literature review provides the foundation for the development of the research framework and hypotheses presented in this study.

2.2 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), originally proposed by Davis (1989), is one of the most established theoretical models used to explain how users accept and utilize new technologies. The model suggests that an individual's intention to use a technological system is largely influenced by two fundamental perceptions: perceived usefulness and perceived ease of use (refer Fig. 1). Perceived usefulness refers to the degree to which a user believes that a system can enhance task performance or improve efficiency, while perceived ease of use relates to the extent to which the system is perceived as simple and effortless to operate. Within the context of e-hailing services, TAM provides a relevant theoretical foundation for understanding students' decisions to adopt and continue using mobile-based transportation applications such as Grab, inDrive, and Maxim. When students perceive these applications as helpful for meeting their transportation needs and easy to navigate, their likelihood of repeated usage increases. Previous empirical studies have consistently shown that application quality, system dependability, and service responsiveness play an important role in shaping users' perceptions of usefulness and ease of use, which subsequently influence behavioral intention (Venkatesh & Bala, 2008; Kumar *et al.*, 2022). In addition, TAM allows for the inclusion of external variables that indirectly affect technology acceptance by influencing users' core perceptions. In this study, app functionality and service reliability, safety concerns, and

fare pricing are incorporated as external factors that shape students' usage behavior. Well-designed and reliable applications contribute positively to both perceived ease of use and perceived usefulness. Safety-related factors influence users' trust, confidence, and sense of comfort when using e-hailing services, particularly in unfamiliar or late-hour travel situations. Meanwhile, fare pricing affects students' perceptions of value and affordability, which is especially relevant given the financial constraints commonly faced by university students. By applying TAM within a university context, this study extends the model to account for practical and situational factors that influence students' transportation choices. This approach provides a more context-sensitive understanding of e-hailing adoption and supports the proposed research framework and hypotheses.

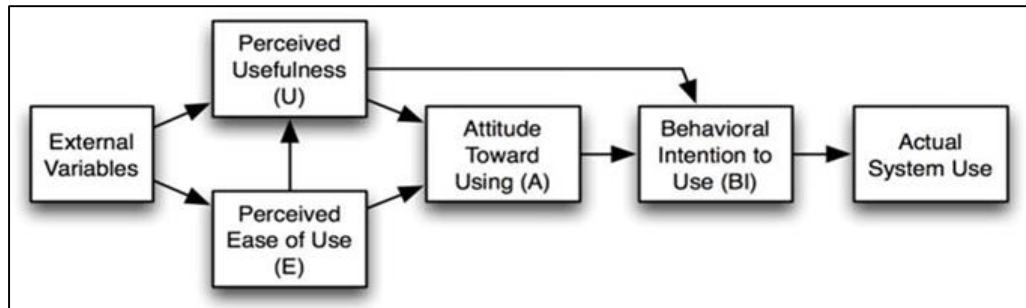


Fig. 1 TAM Framework

2.3 App Functionality and Service Reliability on E-Hailing Service Usage

App functionality and service reliability are widely recognized as critical determinants of e-hailing service usage, particularly in technology-mediated transportation systems. Within the Technology Acceptance Model (TAM), system quality plays a central role in shaping users' perceptions of perceived usefulness and perceived ease of use, which subsequently influence attitudes toward use and behavioral intention (Davis, 1989; Venkatesh & Bala, 2008). In the context of e-hailing applications, high system quality reflects the ability of the platform to operate smoothly, accurately, and consistently during service delivery. Effective app functionality includes features such as intuitive user interfaces, smooth booking processes, accurate GPS-based location tracking, real-time ride updates, fare transparency, and secure digital payment systems. These features reduce users' cognitive effort, enhance task efficiency, and improve overall user experience (Kumar *et al.*, 2022; Bhaduri *et al.*, 2024). When users perceive the application as easy to navigate and responsive, they are more likely to view the service as useful and reliable, thereby strengthening their intention to continue using the platform. Prior studies have demonstrated that perceived system usability significantly increases ride-hailing adoption and customer satisfaction, especially among younger, tech-savvy users such as university students (Brown & LaValle, 2020).

Beyond technical functionality, service reliability including consistent driver availability, punctual arrival times, minimal ride cancellations, and stable fare calculations plays a crucial role in shaping trust toward e-hailing services. Reliable service performance reduces uncertainty and frustration, which are common barriers to continued usage in on-demand transportation services (Rayle *et al.*, 2016; Watanabe *et al.*, 2023). Frequent app crashes, delayed pickups, or sudden cancellations can negatively affect users' perceptions of dependability, leading to reduced confidence and lower usage frequency. This issue is particularly relevant for university students, who often rely on e-hailing services for time-sensitive travel such as attending lectures, group discussions, examinations, or off-campus activities. In such situations, delays or unreliable service can result in academic disruption and increased stress. Empirical studies indicate that students place high importance on service reliability due to their structured schedules and limited alternative transportation options (Brown & LaValle, 2020; Watanabe *et al.*, 2023). Consequently, reliable app performance and consistent service delivery become essential in sustaining usage among student populations.

Furthermore, several studies have shown that app functionality and service reliability significantly influence both initial adoption and continued usage of e-hailing services. For instance, Rayle *et al.* (2016) found that users were more likely to repeatedly use ride-hailing platforms when they perceived the system to be dependable and responsive. Similarly, Kumar *et al.* (2022) reported that system quality and service reliability were strong predictors of ride-hailing usage intention in emerging markets, including Southeast Asia. Based on the Technology Acceptance Model and empirical evidence from prior studies, it is evident that app functionality and service reliability play a significant role in influencing e-hailing service usage. Therefore, this study hypothesizes that:

H1: App functionality and service reliability have a significant positive influence on the usage of e-hailing services among FPTP students at UTHM.

2.4 Safety Concerns on E-Hailing Service Usage

Safety concerns are a critical determinant of e-hailing service adoption and continued usage, particularly among university students who frequently rely on such services for daily commuting and late-hour travel. In the context of e-hailing, safety concerns refer to users' perceptions of personal security, driver professionalism, vehicle condition, and the availability of in-app safety mechanisms such as emergency assistance buttons, trip-sharing features, GPS tracking, and driver identity verification (Acheampong, 2021; Javid *et al.*, 2022; Su *et al.*, 2025). These factors collectively shape users' trust in the platform and their willingness to engage with the service. From a theoretical perspective, perceived risk theory suggests that higher levels of perceived risk reduce individuals' intention to adopt a service, even when the service offers convenience and economic benefits (Liu *et al.*, 2022). In e-hailing services, perceived safety risks may override perceived usefulness or ease of use, especially in situations involving unfamiliar drivers or nighttime travel. This highlights the importance of safety as a non-negotiable requirement rather than a value-added feature. Empirical studies indicate that safety concerns are particularly pronounced among female users. Female students often perceive higher vulnerability to risks such as harassment, verbal misconduct, unsafe driving behavior, or assault during e-hailing trips (Ricardianto *et al.*, 2024; Mahayuddin & Ismail, 2024). As a result, safety assurance becomes a decisive factor in determining whether female students are willing to continue using e-hailing services. Research by Ricardianto *et al.* (2024) demonstrates that perceived driver professionalism and visible safety features significantly increase female users' confidence and usage frequency.

In the Malaysian context, safety has been consistently identified as a significant predictor of e-hailing usage. Azmi *et al.* (2023) found that negative safety experiences, such as reckless driving or poor driver conduct, have long-lasting effects on user trust and may discourage future usage regardless of fare affordability or app convenience. Similarly, Yunoh *et al.* (2020) reported that Malaysian users place high importance on regulatory compliance, driver screening, and vehicle condition when choosing e-hailing services. Safety concerns are further intensified in semi-urban university environments, such as Universiti Tun Hussein Onn Malaysia (UTHM), where public transportation options are limited and students may have fewer alternative travel choices. In such settings, students often depend heavily on e-hailing services for off-campus travel, making safety assurance essential rather than optional (Liu *et al.*, 2022). The availability of real-time tracking, emergency contact features, and verified driver information helps mitigate perceived risks and enhances students' sense of control during travel. Moreover, several studies have demonstrated that safety-related features positively influence trust, which in turn affects continued usage intention. Trust acts as a mediating factor between safety perception and behavioral intention, particularly among young adults and students (Javid *et al.*, 2022; Su *et al.*, 2025). When students believe that the platform actively prioritizes their safety, they are more likely to rely on e-hailing services as a regular mode of transportation. Based on theoretical foundations and empirical evidence, safety concerns are expected to significantly influence the use of e-hailing services among university students. Therefore, this study proposes the following hypothesis:

H2: Safety concerns significantly influence the use of e-hailing services among UTHM FPTP students.

2.5 Perceived Fare Pricing on E-Hailing Service Usage

Fare pricing is a critical determinant of e-hailing service usage, particularly among university students who are generally more price-sensitive due to limited financial resources and dependence on allowances or part-time income. In the context of e-hailing services, fare pricing refers not only to the absolute cost of rides but also to users' perceptions of price fairness, transparency, and consistency. According to consumer behavior theory, perceived price fairness significantly influences satisfaction and continued usage intentions, especially in service-based platforms (Castillo *et al.*, 2017; Castillo, 2020). E-hailing platforms commonly adopt dynamic or surge pricing mechanisms, whereby fares increase during periods of high demand, adverse weather conditions, or emergencies (Xu *et al.*, 2023; Ming *et al.*, 2019). While surge pricing is intended to balance demand and supply by incentivizing drivers to operate during peak periods, it often leads to negative user perceptions when price increases are sudden or insufficiently explained. Studies have shown that users are more likely to perceive surge pricing as unfair when it occurs during unavoidable travel situations, such as late-night commutes, examinations, or emergency trips (Castillo *et al.*, 2017). Empirical evidence suggests that higher perceived fares reduce usage frequency, particularly among students. Zha *et al.* (2018) found that price-sensitive users tend to reduce ride-hailing usage or switch to alternative transportation modes when fares exceed their acceptable threshold. Similarly, Watanabe *et al.* (2023) reported that unpredictable pricing discourages repeated usage, even when the service offers superior convenience compared to public transportation.

In the Malaysian context, fare affordability has been identified as a significant factor influencing students' transportation decisions. Azmi *et al.* (2023) reported that excessive e-hailing fares, especially during peak academic periods, act as a barrier to continued usage among university students. This is particularly relevant for students in semi-urban areas, such as Universiti Tun Hussein Onn Malaysia (UTHM), where limited public

transportation options may force students to rely on e-hailing services despite financial constraints. Moreover, transparent pricing mechanisms, such as upfront fare estimates, breakdowns of surge multipliers, and clear explanations for price increases, have been shown to mitigate negative perceptions of surge pricing. Xu *et al.* (2023) emphasized that users are more accepting of higher fares when pricing rules are clearly communicated and perceived as justified. Conversely, a lack of transparency may erode trust and discourage future usage, even if the service remains convenient. Several studies also suggest that fare pricing interacts with other factors such as safety and service reliability. During emergencies or late-night travel, students may prioritize safety over cost; however, excessively high fares during such periods may still discourage usage, highlighting the delicate balance between affordability and necessity (Castillo, 2020). This reinforces the importance of fair and predictable pricing strategies to sustain long-term engagement among student users. Based on these theoretical and empirical insights, fare pricing is expected to significantly influence e-hailing service usage among university students. Therefore, this study proposes the following hypothesis:

H3: Perceived fare pricing, particularly during peak demand or emergency periods, significantly affects the use of e-hailing services among UTHM FPTP student.

2.6 Research Framework

Fig. 2 illustrates the relationship between app functionality and service reliability, safety concerns, and fare pricing, and how these factors influence the use of e-hailing services among undergraduate students at Universiti Tun Hussein Onn Malaysia (UTHM). The framework was developed based on the study objectives and previous literature on e-hailing usage behaviour.

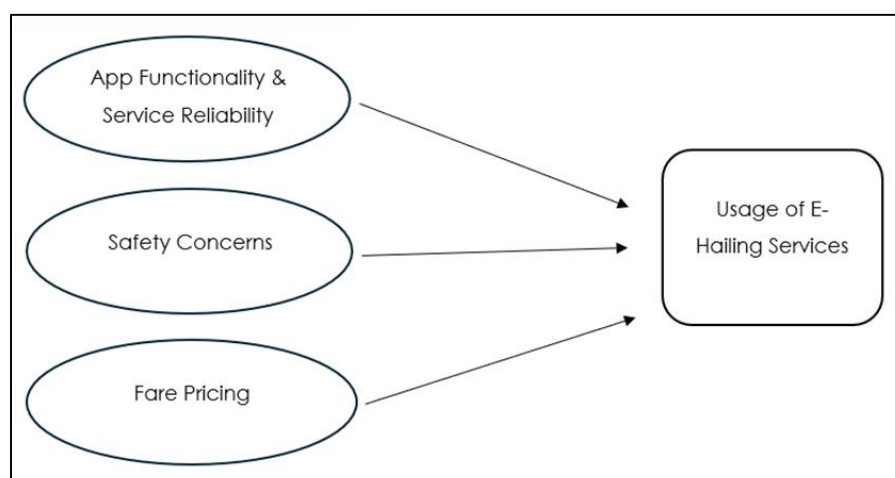


Fig. 2 Research Framework

3. Research Methodology

3.1 Research Design

This study employed a quantitative research design using a cross-sectional approach to examine the relationships between measurable variables, namely app functionality and service reliability, safety concerns, fare pricing perceptions, and the usage of e-hailing services. A quantitative approach is appropriate as it allows for objective measurement and statistical analysis of relationships among variables at a single point in time. Primary data were collected using a structured questionnaire consisting of closed-ended questions measured on a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), to ensure consistency and comparability of responses.

3.2 Population and Sampling

The population for this study comprised 2,323 undergraduate students enrolled in five selected academic programs under the Faculty of Technology Management and Business (FPTP) at the UTHM Parit Raja campus. Purposive sampling, a non-probability sampling technique, was employed to select respondents who met specific criteria, namely FPTP undergraduate students and having prior experience using e-hailing services. Based on the sample size determination table proposed by Krejcie and Morgan (1970), a minimum sample size of 240 respondents was required. A total of 240 valid responses were successfully collected, representing a response rate

of 72.51%, which is considered sufficient for quantitative analysis and helps to reduce the likelihood of non-response bias.

3.3 Data Analysis

Data analysis involves organizing, examining, and presenting data to identify patterns, relationships, and test hypotheses (Creswell, 2014). This study's data will be analyzed using SPSS, which allows easy dataset import, descriptive statistics, and the execution of various statistical tests (Pallant, 2020). Its user-friendly interface supports both simple and advanced analyses, including reliability tests, correlations, and regression, enabling efficient and accurate evaluation of the study's objectives. Descriptive analysis summarizes data to provide a clear understanding of study findings, using statistics such as frequency, percentage, mean, and standard deviation (Trochim, 2020). This study applied descriptive analysis to examine the demographic profile of FPTP undergraduate students at UTHM and the key factors influencing their use of e-hailing services, including app functionality, safety concerns, and fare pricing. Data were analyzed using SPSS version 26 for its efficiency in handling quantitative data (Field, 2018). Cronbach's Alpha was used to assess internal consistency, with scores of 0.70 or above considered acceptable for social science research (Taber, 2018). Reliability analysis was conducted to assess the internal consistency of the questionnaire items, which measures how consistently an instrument evaluates a concept (Field, 2018). Cronbach's Alpha was used for multi-item scales, with higher values indicating greater consistency. A score of 0.7 or above is generally considered acceptable in social science research (Tavakol & Dennick, 2011). In this study, reliability analysis was applied to all items related to the independent and dependent variables, confirming that the scales were sufficiently consistent for further statistical analysis. Spearman's correlation coefficient examines the relationship between two continuous variables, indicating whether the relationship is positive, negative, or non-existent (McLeod, 2020). Before interpreting the results, significance is checked to determine whether hypotheses regarding the variables can be accepted or rejected. In this study, Spearman's correlation was used to assess the association between the independent variables perceived ease of use, social influence, and perceived price and the dependent variable, behavioural intention. A correlation was considered significant if the p-value was less than 0.05, indicating a meaningful relationship between the variables.

Table 1 Degree of Correlation Coefficient

Range Of Correlation Coefficients	Degree of Correlation
0.80-1.00	Very strong positive
0.60-0.79	Strong positive
0.40-0.59	Moderate positive
0.20-0.39	Weak positive
0.00-0.19	Very weak positive
0.00-(-0.19)	Very weak negative

3.4 Pilot Study

The research process began with the development of a conceptual framework and the formulation of research hypotheses based on an extensive review of relevant literature related to e-hailing services and technology acceptance. A pilot study involving 30 undergraduate students was conducted prior to the actual data collection to assess the reliability and clarity of the research instrument. The pilot test results indicated satisfactory internal consistency, with Cronbach's Alpha values exceeding the acceptable threshold of 0.70, confirming the reliability of the questionnaire items. Following minor refinements, full-scale data collection was carried out using an online self-administered questionnaire distributed through Google Forms. The use of an online survey facilitated wider reach, faster response rates, and ensured respondent anonymity, confidentiality, and voluntary participation.

4. Results and Discussion

4.1 Response Rate

Table 2 shows the response rate of this study. A total of 331 questionnaires were distributed to FPTP undergraduate students at UTHM. Out of these, 240 responses were valid and usable. With a target sample size of 331, the response rate was 72.51%. The survey response rate is summarized in Table 2.

Table 2 Response Rate

Sample size (s)	Number of respondent (n)
Target sample	331

Actual sample	240
Response rate	$(240/331) \times 100\% = 72.51\%$

4.2 Demographic Analysis

Table 3 shows the demographic profile of the respondents. Respondents were categorized by gender, age, program of study, year of study, prior experience with e-hailing services, and duration of usage. The majority were aged 19–23 years. Both male and female students were represented, and most had prior experience with e-hailing services. The demographic profile provides context for analysing e-hailing usage among UTHM FPTP students.

Table 3 Summary of demographic analysis

Category	Details	Frequency, N=240	Percent (%)
Gender	Male	123	51.2
	Female	117	48.8
Age	19-20 years	56	23.3
	21-22 years	71	29.6
	23-24 years	96	40
	25 years and above	17	7.1
Programme	BPA	44	18.3
	BPB	89	37.1
	BPC	65	27.1
	BPD	42	17.5
Year or study	Year 1	35	14.6
	Year 2	65	27.1
	Year 3	62	25.8
	Year 4	78	32.5
Experience of e-hailing use	Yes	240	100
	No	0	0
Duration of e-hailing use	Less than a year	48	20
	2 years	74	30.8
	3 years	71	29.6
	More than 3 years	47	19.6

4.3 Reliability Analysis

Table 4 shows the reliability analysis of all constructs in this study. Five items per construct were measured using a Likert scale. All variables had Cronbach's alpha values above 0.7, indicating satisfactory internal consistency. Usage of E-Hailing Services scored 0.779, App Functionality & Reliability 0.744, Safety & Security Concerns 0.745, and Fare Pricing Perceptions 0.737. The overall reliability for all 20 items was 0.923, confirming that the questionnaire is reliable and suitable for further data analysis.

Table 4 Reliability Analysis

Variable	Number of Items	Cronbach's Alpha
Usage of e-hailing services	5	0.779
App functionality and reliability	5	0.744
Safety and security Concerns	5	0.745
Fare pricing perceptions	5	0.737
	20	0.923

4.4 Descriptive Analysis

Table 5 shows the mean scores for all constructs, indicating that students have positive perceptions of e-hailing services. The highest mean was for App Functionality & Reliability (Mean = 4.2483, SD = 0.60264), followed closely by Fare Pricing Perceptions (Mean = 4.2400, SD = 0.58979), suggesting that ease of use, reliability, and fair pricing strongly influence service usage. Safety & Security Concerns also scored high (Mean = 4.2192, SD = 0.59126), showing that safety features are important to students. Usage of E-Hailing Services had the lowest mean score (Mean = 4.2025, SD = 0.65264) but still reflected a high level of agreement. Overall, app functionality, pricing, and safety are key factors driving students' behavioural intention to use e-hailing services.

Table 5 Descriptive Analysis

Variable	N	Mean	Std. Deviation
Usage of e-hailing services	240	4.2025	0.65264
App functionality and reliability	240	4.2483	0.60264
Safety and security Concerns	240	4.2192	0.59126
Fare pricing perceptions	240	4.2400	0.58979

4.5 Normality Test

Table 6 shows the results of the normality tests using Kolmogorov-Smirnov and Shapiro-Wilk. The findings indicate that none of the constructs are normally distributed, as all Shapiro-Wilk p-values are below 0.005 ($p < 0.001$).

Table 6 Normality Test

Variable	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Usage of e-hailing services	0.386	240	<.001	0.696	240	<.001
App functionality and reliability	0.391	240	<.001	0.702	240	<.001
Safety and security Concerns	0.378	240	<.001	0.737	240	<.001
Fare pricing perceptions	0.365	240	<.001	0.714	240	<.001

4.6 Correlation Analysis

Correlation analysis was conducted to examine the relationship between independent and dependent variables. This analysis identifies the strength and direction of the relationship. Both Pearson and Spearman correlation coefficients were used (Aggarwal & Ranganathan, 2016). The results are presented in Table 7. This study examined the factors influencing undergraduate students at Universiti Tun Hussein Onn Malaysia's Faculty of Technology Management and Business (FPTP) in using e-hailing services, focusing on app functionality and reliability, safety and security, and fare pricing. The findings indicate that all three factors significantly affect students' usage. Students prefer apps that are user-friendly, reliable, and efficient, highlighting the importance of app performance in facilitating service adoption. Safety and security emerged as the most influential factor, especially for students traveling at night or to unfamiliar areas, while fare pricing also affects usage, with clear and reasonable fares encouraging continued use among budget-conscious students. Based on these findings, several recommendations are proposed. First, e-hailing service providers should prioritize improving app functionality and system reliability. A stable, easy-to-use application enhances students' perceived ease of use and trust, supporting their continued adoption of the service. Second, safety and security measures should be strengthened and clearly communicated. Features such as comprehensive driver background checks, real-time ride tracking, and emergency support can address students' primary concerns and increase their confidence in using e-hailing services. Third, transparent and student-friendly pricing strategies are recommended. Clear fare structures and upfront price estimates can reduce price uncertainty and encourage consistent usage.

Table 7 Spearman Correlation Analysis

Hypothesis	Factor	Correlation Rank (r)	Significant (p)
H1	App functionality and reliability	0.791	<0.001
H2	Safety and security Concerns	0.842	<0.001
H3	Fare pricing perceptions	0.412	<0.001

5. Conclusion

Suggestion for future research, expanding the sample to include students from other faculties or universities can improve generalizability, while qualitative methods, such as interviews or focus groups, can provide deeper insights into students' experiences and perceptions of e-hailing services. In conclusion, this study demonstrates that app functionality, safety, and fare pricing are key determinants of e-hailing adoption among university students. Implementing these recommendations can enhance usability, trust, and satisfaction, thereby promoting sustained use of e-hailing services.

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Conflict of Interest

Authors declare that there is no conflict of interest regarding the publication of the paper.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** Surendran Arumugam and Fadillah Ismail; **data collection:** Surendran Arumugam; **analysis and interpretation of results:** Surendran Arumugam and Fadillah Ismail; **draft manuscript preparation:** Fadillah Ismail. All authors reviewed the results and approved the final version of the manuscript.

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