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IMPACT OF PERCEIVED SAFETY ON WOMEN'S ADOPTION OF E-HAILING SERVICES IN COIMBATORE CITY

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ABSTRACT

The growing use of e-hailing services has revolutionized urban transportation, delivering convenience and accessibility to users. However, safety concerns remain as an important factor influencing women's decision to choose these services. This study investigates the impact of perceived safety on women's adoption of e-hailing services. The main focus of research is on how factors such as driver behaviour, vehicle tracking, emergency support features, and platform reliability shapes women's confidence and willingness to use ride-hailing platforms. Primary data were collected through a structured questionnaire from women users of e-hailing services in Coimbatore city. This data were analysed using appropriate statistical techniques. The findings of the study indicates that perceived safety plays an important role in influencing women's adoption of e-hailing services and their overall trust in these platforms. The study also suggests that improving safety measures and technological support systems can enhance women's confidence and encourage greater use of e-hailing services.

INTRODUCTION

The convenient and quick travel through mobile applications made E-hailing services a popular mode of transportation in many cities. Services such as Uber, Ola Red taxi, Rapido allow users to easily book rides, track vehicles, and make digital payments. Although these services offer many benefits, safety remains an important issue, especially for women users. Many women consider determinants such as driver behaviour, vehicle tracking, and emergency safety features before using e-hailing services. When women feel safe and secure, they are more likely to choose and regularly use these services. Therefore, understanding women's perception of safety is significant for improving the quality of e-hailing services and encouraging more women to use them. This study mainly focuses on investigating the impact of perceived safety on women's adoption of e-hailing services.

OBJECTIVES

- To study women's perception of safety in e-hailing services.
- To identify the factors influencing perceived safety among women users of e-hailing services.
- To examine the impact of perceived safety on women's adoption of e-hailing services.

REVIEW OF LITERATURE

Bahar, Fahira, and Achsa (2024) investigated how perceived service quality shapes user satisfaction in ride-hailing passenger services in Palu City, Central Sulawesi, Indonesia. The study aimed to profile ride-hailing users and to test a structural model linking service quality dimensions to satisfaction using Structural Equation Modeling (SEM) implemented in LISREL 8.8. Service quality was modelled through comfort, accessibility, safety, time, and fare, measured by ten observed indicators including cabin temperature and cleanliness, door-to-door service, ease of access, safety threats and risky driving, pickup responsiveness, travel time, distance-based payment, and digital payment facilitation; satisfaction was measured through overall satisfaction and intention to continue using the service.

Surya and Surtiningsih (2019) tested the effects of service quality and price on customer satisfaction in Indonesia's ride-hailing sector using Grab as the focal platform. Using SERVQUAL, service quality was operationalized through reliability, responsiveness, assurance, empathy, and tangibles, and price was modelled as an additional predictor of satisfaction in a market characterized by close substitution and switching behavior across platforms.

RESEARCH METHODOLOGY

This study is descriptive research based on primary data. It was conducted in the Coimbatore City with 200 women users of E hailing Platforms. A self-administered online survey was conducted and proportionate random sampling method is used. The tools which have been used for data analysis are charts, diagrams, frequency, table, percentage analysis and the secondary data were collected from various websites, articles, newspapers, etc.

DATA ANALYSIS & INTERPRETATION

Table no. 1: Age Distribution of the Respondents

Age	No of respondents	Percentage
18-24	74	37
25-34	67	34
35-44	32	16
45-54	17	8
Above 55	10	5
Total	200	100

The table shows the age distribution of the respondents. The majority of respondents (37%) belong to the age group 18–24, followed by 25–34 years (34%). About 16% of respondents fall in the 35–44 age group, while 8% are between 45–54 years. Only 5% of respondents are above 55 years. This indicates that younger women are the major users of e-hailing services.

Table no.2: Most Frequently Used E-hailing Service Among Respondents

E-hailing platform	Frequency	Percentage

Red taxi	80	40.0
Uber	64	32.0
Ola	14	7.0
Boom cab	10	5.0
Rapido	12	6.0
Fast track	20	10.0
Total	**200**	**100.0**

The table indicates the most frequently used e-hailing platforms among respondents. The majority of respondents (40%) prefer Red Taxi, followed by Uber (32%). About 10% of respondents use Fast Track, while 7% prefer Ola. Smaller percentages of respondents use Rapido (6%) and Boom Cab (5%). This shows that Red Taxi and Uber are the most commonly used e-hailing services among women respondents.

Table no. 3: Experience of Safety Issues while Using E-Hailing Services

Options	**Frequency**	**Percentage**
Yes	32	16.0
No	168	84.0
TOTAL	**200**	**100.0**

The table reveals that 84% of respondents have not experienced any safety issues while using e-hailing services. However, 16% of respondents reported that they have faced safety issues. This suggests that although most women feel safe while using e-hailing services, safety concerns still exist for some users.

Table no. 4 : Factors that Make Women Feel Safer in E-Hailing Services

Factors	**Frequency**	**Percentage**
GPS Tracking	74	37.0
Trip Sharing Option	16	8.0
Driver details in the App	86	43.0
Emergency/SOS button	24	12.0
TOTAL	**200**	**100.0**

The table shows the factors that contribute to women's sense of safety while using e-hailing services. The majority of respondents (43%) feel safer when driver details are available in the

application. About 37% feel safe due to GPS tracking, while 12% consider the emergency/SOS button as an important safety feature. Only 8% of respondents feel safer due to the trip-sharing option. This indicates that transparency of driver information and tracking features are important safety factors for women users.

Table no. 5 :Influence of Safety Features on the Decision to Use E-Hailing Services

Level of Influence	Frequency	Percentage
Strongly influence	90	45.0
Moderately influence	70	35.0
Slightly influence	30	15.0
Do not influence	10	5.0
TOTAL	**200**	**100.0**

The table shows the influence of safety features on the use of e-hailing services. A majority of respondents (45%) stated that safety features strongly influence their decision to use e-hailing services. About 35% reported that safety features moderately influence their decision. Meanwhile, 15% indicated that safety features slightly influence their decision, and only 5% stated that safety features do not influence their decision. This indicates that safety features play a significant role in women's adoption of e-hailing services.

HYPOTHESIS TESTING USING CHI-SQUARE

H_0 (Null Hypothesis):

There is no significant relationship between Age of respondents and Experience of safety issues in e-hailing services.

H_1 (Alternative Hypothesis):

There is a significant relationship between Age of respondents and Experience of safety issues in e-hailing services.

Calculated value =3.21
Degree of freedom =4
Table value =9.488
Level of significance =0.05
Since 3.21 < 9.488, the null hypothesis is accepted.

This result indicates that there is no significant relationship between the age of respondents and their experience of safety issues while using e-hailing services. Women across different age groups reported similar levels of safety experience while using ride-hailing platforms such as Uber and Ola.

FINDINGS

- The majority of respondents belong to the 18–24 age group, indicating that young women are the main users of e-hailing services.

- Red Taxi and Uber are the most frequently used e-hailing services among respondents.
- Most respondents (84%) have not experienced safety issues while using e-hailing services.
- Driver details in the application and GPS tracking are the most important safety features that make women feel secure.
- Safety features have a strong influence on women's decision to use e-hailing services.

SUGGESTIONS

- E-hailing companies should strengthen safety features such as driver verification and real-time tracking.
- Companies should improve the visibility and awareness of emergency/SOS features in their applications.
- E-hailing platforms should provide better driver background verification to increase trust among women users.
- Awareness campaigns can be conducted to educate women users about available safety features in the applications.
- Continuous monitoring of driver behaviour and quick response to complaints can further improve women's confidence in using these services.

CONCLUSION

E-hailing services have become an important mode of transportation for women due to their convenience and accessibility. The study shows that safety features play a significant role in influencing women's decision to use these services. Most respondents feel safe using e-hailing platforms, especially when features such as driver details and GPS tracking are available. However, some safety concerns still exist, indicating the need for further improvement in safety measures. Strengthening safety mechanisms and increasing awareness of safety features can encourage more women to adopt e-hailing services and enhance their overall travel experience.

REFERENCE

- Bahar, T., Fahira, F., & Achsa, D. R. (2024). The model of service quality influence on the existence of ride-hailing service operations using the structural equation modeling (SEM) method. International Journal of Research in Engineering and Science, 12(12), 25-34.
- Balamurugan, G., & Kirubanidhi, S. (2024). Service quality of ride hailing companies. International Journal of Research Publication and Reviews, 5(11), 6488-6500.
- Chia, K. M., Ahmad, R., Tee, P. K., & Rashid, T. A. (2019). Evaluation of service quality dimensions towards customer's satisfaction of ride-hailing services in Kuala Lumpur, Malaysia. International Journal of Recent Technology and Engineering, 7(5S), 102-108.
- Shah, S. A. H., & Kubota, H. (2022). Passenger's satisfaction with service quality of app-based ride hailing services in developing countries: Case of Lahore, Pakistan. Asian Transport Studies, 8, 100076.
- Shayo, E. E., & Masele, J. J. (2024). Determinants of customer satisfaction for ride-hailing services in Tanzania. Tanzania Journal of Development Studies, 22(2), 1–25.

- Sikder, S., Rana, M. M., & Polas, M. R. H. (2021). Service quality dimensions (SERVQUAL) and customer satisfaction towards motor ride-sharing services: Evidence from Bangladesh. Annals of Management and Organization Research, 3(2), 97–113.

- Surya, A. P., & Surtiningsih. (2019). The impact of service quality and price on customer satisfaction: A lesson from Grab ride-hailing platform in Indonesia. Saudi Journal of Business and Management Studies, 4(3), 264-270.
- Torrao, G., Htait, A., & Wong, S. H. S. (2024). Perceptions of women's safety in transient environments and the potential role of AI in enhancing safety: An inclusive mobility study in India. Sustainability, 16(19), 8631.
- Violin, F. L., Zorzi, M., Arizaga, H. F., & Gouveia, L. B. (2022). Female consumption drivers associated with ride-hailing in Brazilian capitals. Journal of Globalization, Competitiveness and Governability, 16(3), 117–131.
- Yang, Y., Hu, S., Liao, D., & Huang, X. (2022). What affects safety perception of female ride-hailing passengers? An empirical study in China context. Journal of Advanced Transportation, 2022, Article 3316535.