

E-ISSN: 2708-4523
P-ISSN: 2708-4515
Impact Factor (RJIF): 5.61
AJMC 2025; 6(2): 1578-1585
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www.allcommercejournal.com

www.allcommercejournal Received: 13-08-2025 Accepted: 18-09-2025

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# Role of the Karnataka state government's Shakti scheme in enhancing women's mobility and financial independence: A study

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**DOI:** <a href="https://www.doi.org/10.22271/27084515.2025.v6.i2q.886">https://www.doi.org/10.22271/27084515.2025.v6.i2q.886</a>

## Abstract

A woman is the lamp of life; her own flame lights the world around her, warming hearts and guiding souls. When a woman is educated, the family learns, and society flourishes. Confined within four walls, her light cannot reach the world. The Shakti Scheme, launched by the Government of Karnataka, provides women with free travel across the state, significantly enhancing their mobility. Since its implementation, the scheme has positively influenced multiple sectors: economic activities have expanded, tourism has grown, cultural events have flourished, and industrial development has accelerated. Additionally, it has encouraged greater participation of women in the workforce, contributing to overall social and economic empowerment. This study examines the effectiveness of the Shakti Scheme in promoting economic independence and mobility among women. The scheme supports women commuters by reducing financial burdens, enhancing financial independence, improving mobility, and increasing employability. The study of 664 women commuters under Karnataka's Shakti Free Bus Travel Scheme reveals significant improvements in mobility, savings, and empowerment. To further strengthen the scheme, the government should enhance infrastructure, ensure safety through CCTV and women conductors, and integrate it with employment and entrepreneurship programs. Regular evaluation and alignment with broader empowerment initiatives can ensure longterm socio-economic benefits for women across Karnataka.

Keywords: Shakti scheme, empowerment, economic independence and mobility

## Introduction

Transportation not only provides essential services but also connects and expands people's lives. A free public transportation service can play a vital role in promoting commercial activities, especially in economically backward regions of the country. In this context, the Government of Karnataka launched the "Shakti Scheme" on June 11, 2023, to provide free public transport services for women commuters across KSRTC, BMTC, and other state transport corporations. The scheme covers ordinary, urban, express, and regular transport buses, enabling women to travel anywhere within the state without any minimum distance limit. On average, 54 lakh women travel daily under the scheme, costing the government about ₹11-12 crore per day, ₹300 crore monthly, and approximately ₹3,600 crore annually as subsidies to transport corporations. The Shakti Scheme has also contributed to a rise in religious tourism, further supporting women's socio-economic mobility and inclusion (Chiranjeevi and Giridhar, 2023) [12]. The main objectives of this initiative are to increase female labour force participation, encourage women's involvement in economic activities, reduce financial dependency, and alleviate poverty in society. This progressive step not only addresses the mobility needs of women but also contributes to the overall economic development and social prosperity of the state. In earlier times, women were often confined within the four walls of the household, restricted by societal norms that limited their roles to domestic responsibilities. However, times have changed. Today, women are not only managing their families but also excelling in business and contributing significantly to every sector of the economy. To further strengthen women's empowerment, the Government of Karnataka has introduced several guarantee schemes such as the Shakti Scheme, Gruha Lakshmi Scheme, and others, which aim to enhance women's economic independence, social participation, and overall well-being. The Shakti Scheme offers free bus travel for women across Karnataka through four major state transport corporations:

- 1. Karnataka State Road Transport Corporation (KSRTC)
- 2. Bangalore Metropolitan Transport Corporation (BMTC)
- 3. North West Karnataka Road Transport Corporation (NWKRTC)
- 4. Kalyana Karnataka Road Transport Corporation (KKRTC)

Before the Shakti Scheme, the four RTCs together operated 23,389 buses covering around 65.02 lakh kilometers daily, serving 82.51 lakh passengers and generating an average daily revenue of ₹24.48 crore. To meet growing demand under the Shakti Scheme, the RTCs planned to procure 1,894 additional buses and revise routes to improve service frequency based on demand. After implementation, the daily ridership increased significantly to 1.09 crore passengers, showing a remarkable rise in public transport usage among women. Correspondingly, the average daily revenue also increased to ₹28.89 crore, despite providing free travel for women, due to higher passenger volumes and government reimbursements. While there were temporary decreases in bus frequency in some areas, the scheme overall boosted public mobility, particularly for women, and strengthened Karnataka's commitment to inclusive and accessible transportation (Chiranjeevi and Giridhar, 2023) [12]. According to the data, a total of 226.95 crore women passengers travelled under the Shakti Scheme, amounting to a total ticket value of ₹5,526.64 crore across the four state transport corporations. Among them, the Bangalore Metropolitan Transport Corporation (BMTC) recorded the highest number of women passengers at 71.46 crore, with a corresponding value of ₹937.01 crore. The Karnataka State Road Transport Corporation (KSRTC) followed closely, serving 69.9 crore women passengers valued at ₹2,111.14 The North West Karnataka Road Transport Corporation (NWKRTC) facilitated travel for 52.12 crore women, amounting to ₹1,352.68 crore, while the Kalyan Karnataka Road Transport Corporation (KKRTC) reported 33.47 crore women passengers with a ticket value of ₹1,125.81 crore (Chiranjeevi and Giridhar, 2023) [12]. Since the launch of the Shakti Scheme, all four state transport corporations together have recorded a total of 837.72 crore rides, reflecting its massive utilization across Karnataka. Among these, women passengers have played a significant role, accounting for a large portion of total ridership. The Bengaluru Metropolitan Transport Corporation (BMTC) recorded the highest number of women riders at 158.10 crore, followed by the Karnataka State Road Transport Corporation (KSRTC) with 151.21 crore, the North West Karnataka Road Transport Corporation (NWKRTC) with 116.53 crore, and the Kalyana Karnataka Road Transport Corporation (KKRTC) with 71.94 crore. As of July 11, 2025, women alone have taken 497.79 crore rides across these four transport corporations KSRTC, KKRTC, NWKRTC, and BMTC under the Shakti Scheme. The total ticket value corresponding to these free rides is estimated at ₹12,614 crore, underscoring the substantial financial contribution of the government toward promoting women's mobility, empowerment, and participation in economic activities through free public transportation (The New Indian express on 31 Oct 2025). Karnataka's Shakti Scheme provides free bus travel for women, enhancing mobility, economic participation, and socio-economic inclusion. While boosting tourism and empowerment, its impact on

female workforce participation and business activities remains underexplored. This study assesses the scheme's effectiveness in promoting women's mobility, employment, and economic independence.

## **Review of literature**

Chiranjeevi and Giridhar (2023) [12] studied the influence of demographic and women empowerment factors on the satisfaction of women commuters under the Shakti scheme. The study found that after the introduction of the scheme, female commuters actively participated in economic activities and saved transportation costs. Participating in self-help groups, involving religious tourism, and the respondents were highly satisfied with the scheme. It created more employment opportunities, increased female labour force participation, economic independence, and control over their lives. Poverty alleviation and decision-making power increased due to the introduction of the scheme. The study suggested that the government should enhance the number of buses and provide inter-state free travel facilities.

Umakanth *et al.* (2023) <sup>[11]</sup> highlighted the proper execution challenges and analysis of women commuters' perspectives and experiences, socio-economic impact, and accessibility of the scheme. The study found that the majority of respondents stated the scheme was beneficial, encouraging women to participate in the nation-building process. However, most of the respondents expressed mixed opinions toward the impact, user-friendliness, and challenges. The study suggested collaborating with corporate entities to support women's initiatives and encourage steady participation.

Kanakamalini and Pratheeksha (2023) [4] analyzed the need and impact of the scheme on economic dependency and economic security for women through guarantee schemes like the Shakti and Gruhalakshmi Schemes. The study found that the guarantee schemes have affected budget allocations and borrowings due to the need to balance the expenditure requirements. Although the expenditure increased in these schemes, it reduced the subsidy burden in other areas. The scheme benefited low-wage women and female students and the government should take care to ensure a safe transport system. Overall, the scheme had a positive impact. It is crucial for encouraging female labour force participation, which would increase the economic development of the nation as well as the economic independence of women in the state.

Kabade (2024) <sup>[5]</sup> reviewed the revenue and routine processes of KSRTC before and after the implementation of the Shakti Scheme. He found that the department of KSRTC received higher income after the implementation of the scheme, and the number of trips and passengers travelling per day also increased. The study suggested that the government should provide free bus services only to BPL cardholders and not for APL. It also advised that the government should plan effectively for the department to utilize KSRTC resources properly and provide good services to needy people.

Sharman *et al.* (2024) <sup>[7]</sup> examined the cross-sectional study of the perceived association between fare-free buses and physical activity. The study found that using free bus fares led to more physical activity, resulting in household cost savings and better social and mental health benefits.

Vijayakumar (2025) [9] highlighted the effects of the scheme

and its utilization as a means of empowering women in society. The study found that the majority of respondents stated that the scheme had positively impacted women's economic independence in the state. Most respondents were not satisfied with the safety measures taken by the government and the improper transportation facilities. The study suggested that the government should properly manage transportation services to avoid overcrowding and inconvenience issues and increase the number of buses under the scheme.

Jyothi (2025) [3] analyzed the socio-economic impact, accessibility, availability, and reliability of free bus services for women under the Shakti Scheme. The study was conducted through a survey from 203 female bus users, and the majority of respondents stated mixed opinions regarding the scheme's progress. Most of them mentioned that the scheme positively affected women's monetary dependency. The scheme was found to enhance confidence, physical decision-making power. and independence. It also contributed to women's economic empowerment, creating opportunities to access higher education and employment, leading to financial independence.

#### Statement of the Problem

The Government of Karnataka launched the Shakti Scheme on June 11, 2023, to provide free public transport for women across KSRTC, BMTC, and other transport corporations. Covering ordinary, urban, and express buses, the scheme allows women to travel anywhere within the state, thereby promoting economic participation and mobility. It has boosted religious tourism and enhanced women's socio-economic inclusion. The scheme aims to increase female labour force participation, reduce financial dependency, and alleviate poverty. Along with other initiatives such as the Gruha Lakshmi Scheme, it strengthens women's economic independence, empowerment, and social well-being, contributing to Karnataka's overall development and prosperity. However, although the government introduced the innovative Shakti Scheme to empower women commuters economically, socially, and industrially, the effectiveness of the scheme in achieving socio-economic development has not been fully assessed. Previous studies have explored gender-based transport issues, focusing mainly on safety, accessibility, revenue, operational processes, and levels of satisfaction and impact yet with limited attention to the business perspective related to free mobility schemes. There remains a lack of empirical evidence on whether such initiatives have improved women's participation in the workforce, business activities, and overall mobility. Addressing this gap is vital, as effective policy evaluation can guide future transport and gender empowerment strategies. Therefore, the present study investigates the extent to which the Shakti Scheme has enhanced women's mobility, employment opportunities, and economic independence in Karnataka.

## Objectives of the Study

- a) To analyze the impact of the Shakti Scheme on women's empowerment, focusing on financial independence, mobility enhancement, participation in socio-economic activities, and overall satisfaction with the scheme.
- b) To analyze the relationship between women commuters' demographic characteristics, financial savings, mobility, financial independence, and satisfaction level with the Karnataka Government's Shakti Free Bus Travel Scheme.

# **Hypotheses**

- a. (H<sub>0</sub>): There is no significant difference in the satisfaction level of women commuters towards the Shakti Scheme across different demographic characteristics.
- **b.** (H<sub>0</sub>): There is no significant relationship between the reduction of financial burden on transportation and the satisfaction level of women commuters with the Shakti Free Travel Scheme.
- c. (H<sub>0</sub>): There is no significant relationship between financial independence resulting from money saved through free travel and satisfaction with the Shakti Free Travel Scheme.
- **d.** (H<sub>0</sub>): There is no significant relationship between improved mobility and participation due to free travel and satisfaction with the Shakti Free Travel Scheme.
- e. (H<sub>0</sub>): There is no significant association between monthly household income and the amount of money saved under the Shakti Free Bus Travel Scheme.
- **f. (H<sub>0</sub>):** There is no significant association between monthly household income and the amount of money saved under the Shakti Free Bus Travel Scheme.

# Scope of the Study

The study analyzed the impact of the Shakti Scheme on women's empowerment, focusing on financial independence, mobility enhancement, participation in socioeconomic activities, and overall satisfaction with the scheme. In addition, the study also focused on the demographic characteristics of women commuters and their level of impact and satisfaction with the Shakti Scheme implemented by KSRTC in Haveri District.

# Research Methodology

The Shakti Scheme, launched by the Government of Karnataka in 2023, provides free bus transportation for women across the state. In this study, the researcher collected data through a structured questionnaire developed after an extensive review of relevant literature. A mixed-methods approach was adopted, combining a quantitative survey with qualitative interviews conducted between May and July 2025. The survey was distributed via email and WhatsApp, resulting in 664 valid responses. The collected data was analyzed using Jamovi software, employing descriptive statistics such as mean and standard deviation, Chi-Squire, Correlation and ANOVA for further analysis.

Table 1: Population, Sampling Method and Sample Size

Sl. No.	Avg. Daily woman Travelers per day in Haveri District	Number of Women Travelers Targeted	Number of Women Travelers Responded	Percentage of Response
1	1,51,200	825	664	80

Source: https://www.surveyking.com/help/sample-size-calculator

According to the Krejcie and Morgan (1970) [10] the sample size of (300+) 664 is considered statistically adequate for a population above 1,00,000 ensuring reliable and generalizable findings at a 95% confidence level. The researcher was able to collect the 664 responses from the women respondents which is sufficient for the further analysis.

#### **Data Collection**

The study collected primary data from 664 women and girls in Haveri District who regularly use the free public bus service. A structured questionnaire, distributed through Google Forms, along with personal and semi-structured interviews, was used to gather responses from students, working women, and daily commuters across various routes. Secondary data were obtained from peer-reviewed journals and research publications accessed through Google Scholar.

## Limitations of the Study

This study was limited to the Haveri District and focused only on women who regularly travel by KSRTC buses. Due to the large population, determining an exact representative sample was challenging. The analysis relied on basic statistical tools such as descriptive statistics, regression, ANOVA, and tabulation. Some respondents may have provided biased or inaccurate answers. Additionally, certain relevant variables may not have been included, and the sample selection may not fully represent all categories of women commuters, which could affect the generalizability of the findings.

## **Data Analysis and Interpretation**

(H<sub>0</sub>): There is no significant difference in the satisfaction level of women commuters towards the Shakti Scheme across different demographic characteristics.

Table 2: Influence of demographic characteristics of women travelers on satisfaction with Shakti scheme

	Satisfaction of women commuters towards Shakti Schem ographic Profile of women commuters  Descriptive  AN							
Demographic Profile of women commuters	Descriptiv	Descriptive						
	Categories	N =664	Mean	SD	F	Sig.		
	Rural	504	3.65	0.955				
Area	Semi urban	140	3.77	0.932	1.98	0.148		
	Urban	20		0.821				
	Below 18 years	72	3.50	0.839				
	18-25 years	328	3.71	1.031				
Age	26-40 years	164	3.73	0.736	1.41	0.240		
C	41-59 years	88	3.55	1.038				
	60 years and Above	12	3.67	0.985				
	No Formal Education	40	3.90	1.057				
	Primary Education	72	3.56	0.902				
El d' lo l'é d'	Secondary Education	120		0.901	8.18	. 001		
Educational Qualification	Undergraduate Degree	148	3.65	0.848	8.18	<.001		
	Postgraduate Degree	68	3.82	1.158				
	Other	88		0.905				
	Below ₹10,000	392	3.62	0.910				
Income level	₹10,001 - ₹20,000	156		0.903				
	₹20,001 - ₹30,000	60	3.60	1.210 6.2	6.29	<.001		
	30,001 - ₹50,000	40	3.50	1.038				
	Above ₹50,000	16	3.25	0.447				
	A few times a week	176	3.95	0.675		<.001		
	Daily	224	3.84	0.904	19.3			
Use the government buses under the Shakti Scheme	Never	12		0.985				
	Occasionally	172	3.33	0.985				
	Rarely							
	Business activities	64	3.63	0.787				
	Education (school/college)	208		0.950				
D	Healthcare visits	120	3.50	0.810	20.1	. 001		
Primary purpose of travel	Other	112	3.25	0.915	20.1	<.001		
	Shopping and social visits	40	3.20	1.344				
	Work/Job-related travel	120	4.20	0.705				
	Less than ₹500	280		0.886				
M 41 ' C C . 1	₹500 - ₹1000	216		0.773	C 00	. 001		
Monthly savings from free travel	₹1001 - ₹2000	104	3.42	1.086	6.90	<.001		
	More than ₹2000 64 3.69				1			
	Auto-Rickshaw	48		5 0.838				
Previous mode of transport	Other	76		0.974				
	Paid Bus Service	452		0.898	12.7	<.001		
	Personal Vehicle (Bike/Car)	80		0.915				
	Walking/Cycling	8		1.069				

(Source: Primary Data)

The above table shows that the satisfaction levels among 664 women commuters under the Shakti Scheme was conducted in relation to various demographic and travel-related characteristics. With respect to place of residence, semi-urban commuters reported the highest satisfaction, while urban commuters showed slightly lower satisfaction. However, the One-Way ANOVA test indicated that the

differences in satisfaction across rural, semi-urban, and urban respondents were not statistically significant (F = 1.98, p > 0.05). Age-wise, most respondents belonged to the 18-25-year category, while the highest satisfaction was recorded among women aged 26-40 years. Similar to the case of residence, the ANOVA test revealed no statistically significant differences in satisfaction across age categories

(F = 1.41, p>0.05). Educational qualification, however, showed a meaningful influence on satisfaction. Women with no formal education reported the highest satisfaction, and the ANOVA results (F = 8.18, p < 0.001) confirmed that educational qualification has a statistically significant impact on satisfaction. SHG members and self-employed women reported the highest satisfaction, while homemakers, retired, and unemployed women showed comparatively lower satisfaction levels. Income levels also showed a clear and statistically significant influence on satisfaction. Women belonging to lower and middle-income groups especially those earning ₹10,001-₹20,000 exhibited higher satisfaction, while higher-income respondents reported noticeably lower satisfaction. The ANOVA result (F = 6.29, p<0.001) confirmed that the level of income significantly affects satisfaction. Among women commuters, the highest satisfaction level was observed among those who use government buses a few times a week (Mean = 3.95). The One-Way ANOVA result (F = 19.3, p<0.001) indicated that the differences in satisfaction scores were statistically significant. Women who used the buses for work or jobrelated travel reported the highest satisfaction (Mean = 4.20), and the ANOVA result (F = 20.1, p < 0.001) showed a

significant difference in satisfaction depending on travel purpose. Women who saved ₹500-₹1000 per month reported the highest satisfaction (Mean = 3.87), and the ANOVA result (F = 6.90, p<0.001) indicated that these differences were statistically significant. Similarly, women who previously used paid bus services showed relatively higher satisfaction (Mean = 3.79), with the ANOVA result (F = 12.7, p < 0.001) confirming that differences in satisfaction based on previous mode of travel were statistically significant. Overall, these findings indicate that factors such as education, income, frequency of bus usage. travel purpose, monthly savings, and previous mode of travel significantly influence satisfaction with the Shakti Scheme. Therefore, the null hypothesis is rejected, as there is a significant difference in satisfaction levels among women commuters toward the Shakti Scheme across different demographic groups.

(H<sub>0</sub>): There is no significant relationship between the reduction of financial burden on transportation and the satisfaction level of women commuters with the Shakti Free Travel Scheme.

**Table 3:** Reduction of financial burden on transportation and the satisfaction level of women commuters with the Shakti Free Travel Scheme.

Variables	Pearson's r	df	p-value
Free travel under the Shakti Scheme helped to reduce financial burden on transportation ar	d 0.594	662	< .001
Satisfaction with the Shakti Free Travel Scheme			

(Source: Primary Data)

The correlation result shows a moderate to strong positive relationship (r = 0.594, p < .001) between the reduction of financial burden on transportation and satisfaction with the Shakti Free Travel Scheme. This indicates that when people experience greater financial relief through free travel, their satisfaction with the scheme also increases. Overall, the Shakti Scheme has effectively helped reduce transportation costs, leading to higher satisfaction levels and a more positive perception among beneficiaries. The null

hypothesis is rejected, and confirming that as the financial burden decreases, satisfaction with the scheme increases significantly.

 $(H_0)$ : There is no significant relationship between financial independence resulting from money saved through free travel and satisfaction with the Shakti Free Travel Scheme.

Table 4: Financial independence resulting from money saved through free travel and satisfaction with the Shakti Free Travel Scheme.

Variables	Pearson's r	df	p-value
More finance independency because of the money saved from free travel and Satisfaction with the Shakti Free Travel Scheme	0.407	662	< .001

(Source: Primary Data)

The correlation result shows a moderate positive relationship (r = 0.407, p < .001) between financial independence resulting from money saved through free travel and satisfaction with the Shakti Free Travel Scheme. This indicates that beneficiaries who experience greater financial independence as a result of free travel tend to be more satisfied with the scheme. Overall, the Shakti Scheme contributes to improving financial independence among users, which in turn enhances their overall satisfaction with

the program's benefits and impact. The null hypothesis is rejected, and confirming a greater financial independence due to free travel leads to higher satisfaction with the scheme.

(H<sub>0</sub>): There is no significant relationship between improved mobility and participation due to free travel and satisfaction with the Shakti Free Travel Scheme.

Table 5: Improved mobility and participation due to free travel and satisfaction with the Shakti Free Travel Scheme.

Variables	Pearson's r	df	p-value
Free travel improved your mobility and participation and Satisfaction with the Shakti Free Travel Scheme	0.455	662	< .001
(Source: Primary Data)			

The correlation result shows a moderate positive relationship (r = 0.455, p < .001) between improved mobility

and participation due to free travel and satisfaction with the Shakti Free Travel Scheme. This indicates that respondents

who experienced better mobility and greater participation in daily activities were generally more satisfied with the scheme. Overall, the Shakti Scheme has played an important role in enhancing women's mobility and participation, which positively influences their satisfaction and overall perception of the program. Therefore, the null hypothesis is rejected, indicating that improved mobility and participation

through free travel lead to higher satisfaction with the scheme.

(H<sub>0</sub>): There is no significant association between monthly household income and the amount of money saved under the Shakti Free Bus Travel Scheme.

Table 6: Monthly household income and the amount of money saved under the Shakti Free Bus Travel Scheme.

Monthly Household Income	Money sav	ed under the fre	e bus travel Shak	ti scheme per month		w2 Toota	D Volue
Within Household Income	Less than ₹500	₹501 - ₹1000	₹1001 - ₹2000	More than ₹2000	Total	χ Tests	P Value
Below ₹10,000	236	92	44	20	392		
₹10,001 - ₹20,000	36	72	32	16	156		
₹20,001 - ₹30,000	8	36	4	12	60	206	<.001
₹30,001 - ₹50,000	0	16	12	12	40		
Above ₹50,000	0	0	12	4	16		
Total	280	216	104	64	664	N=	664

(Source: Primary Data)

The chi-square test result ( $\chi^2=206,\ p<.001$ ) indicates a highly significant association between monthly household income and the amount of money saved under the Shakti Free Bus Travel Scheme. Beneficiaries with lower income levels (below ₹10,000) reported the highest frequency of savings, mostly below ₹500 per month, while those with higher incomes reported greater savings in the ₹1,001-₹2,000 and above ₹2,000 ranges. Therefore, the null

hypothesis is rejected, confirming a highly significant relationship between income level and the amount of money saved.

(H<sub>0</sub>): There is no significant relationship between respondents' suggested improvements under the Scheme and their opinion on introducing more empowerment schemes for women.

**Table 7:** Respondents' suggested improvements under the Shakti Scheme and their opinion on introducing more empowerment schemes for women.

Suggested Improvements	Introduce more empowerment schemes for women						
Suggested Improvements	Yes	No	Total	χ² Tests	P Value		
Operational Improvements (Seating + More routes)	124	4	128		1		
Improve Safety Measures	148	8	156	12.4	0.015		
Increase Number of Buses	188	8	196	12.4	0.013		
Other Suggestions	164	20	184				
Total	624	40	664	N=664			

(Source: Primary Data)

The chi-square test ( $\chi^2 = 12.4$ , p=0.015) shows a significant relationship between respondents' suggested improvements and their opinion on introducing more empowerment schemes for women. Most respondents who supported additional empowerment schemes also emphasized operational improvements (124), better safety measures (148), and increasing the number of buses (188). Since the

p-value (0.015) is less than 0.05, the null hypothesis is rejected.

 $(H_0)$ : There is no significant association between monthly household income and the amount of money saved under the Shakti Free Bus Travel Scheme.

Table 8: Monthly household income and the amount of money saved under the Shakti Free Bus Travel Scheme.

Current Occupation	ing Government	Buses unde	er the Sha	kti Scher	ne			
Current Occupation	A Few Times a Week	Daily	Occasionally	Rarely	Never	Total	χ² Tests	P Value
Agricultural Worker / Farmer	16	8	16	0	0	40		
Daily Wage Laborer	12	8	8	0	0	28		
Government Employee	4	12	20	4	0	40		
Homemaker	48	8	60	44	4	164		
Private Sector Employee	0	16	8	0	0	24	248	<.001
Retired	4	0	4	0	0	8	240	<.001
SHG Member	4	0	4	0	0	8		
Self-Employed	4	36	4	4	0	48		
Student	76	132	40	20	4	272		
Unemployed	8	4	8	8	4	32		
Total	176	224	172	80	12	664	N=	664

(Source: Primary Data)

The results indicate that students and homemakers are the most frequent users, with 132 students and 48 homemakers using the buses daily. Self-employed individuals also show high daily usage (36), while agricultural workers and daily wage laborers use the service occasionally or a few times a

week. The chi-square test ( $\chi^2=206,\ p<.001$ ) reveals a significant association between current occupation and frequency of using government buses under the Shakti Scheme. Additionally, income level and money saved are significantly related. Therefore, the null hypothesis is

rejected, and the alternative hypothesis is accepted.

## Study findings

The findings from the study based on primary data from 664 women commuters under the Karnataka Government's Shakti Free Bus Travel Scheme reveal significant variations in satisfaction levels across demographic and socioeconomic groups. Semi-urban commuters reported the highest satisfaction, followed by rural and urban respondents, reflecting the scheme's stronger impact in semi-urban areas. Most respondents were 18-25 years old. while women aged 26-40 years expressed the highest satisfaction, likely due to their greater travel needs for work and family responsibilities. Women with no formal education reported the highest satisfaction, suggesting that the scheme effectively supports less-educated women who depend on public transport. In terms of occupation, Self-Help Group (SHG) members and self-employed women were the most satisfied beneficiaries, while homemakers, unemployed, and retired women were less satisfied. Income level emerged as a key determinant, with women in the ₹10,001-₹20,000 income range showing the highest satisfaction. The frequency of bus usage also influenced satisfaction those traveling a few times a week were most satisfied. Women using buses for job or work-related travel expressed higher satisfaction, as free travel helps reduce commuting expenses and supports employment. Respondents saving ₹500-₹1000 per month due to the scheme reported the highest satisfaction, while those who earlier used paid bus services also showed greater appreciation. The chi-square test ( $\chi^2 = 206$ , p < .001) confirmed a significant relationship between income level and monthly savings, with lower-income women saving below ₹500 and higher-income women saving up to ₹2,000 or more. Respondents also emphasized the need for operational improvements, better safety, and more buses. Finally, students and homemakers were identified as the most frequent users, with 132 students and 48 homemakers using the buses daily. Overall, the scheme has substantially enhanced women's mobility, financial independence, and empowerment across Karnataka.

## **Suggestions**

- a) Since respondents highlighted the need for operational improvements, the government should increase the number of buses and expand routes, particularly in rural and semi-urban areas, to ensure equitable access for all women commuters.
- b) To encourage more women to use public transport, safety measures such as CCTV surveillance, women conductors on specific routes, better lighting at bus stops, and reserved seating facilities should be strengthened.
- c) As self-employed women and SHG members showed high satisfaction, the government could link the scheme with entrepreneurship and employment programs, helping women access workplaces, training centers, and markets more easily.
- d) Since students and homemakers are among the most frequent users, student-friendly routes during school/college hours and timely services in residential areas can enhance convenience and reliability.
- e) The study found that women saved between ₹500-₹1000 per month; hence, the government could

- encourage women to channel these savings into selfhelp groups, savings accounts, or small-scale business ventures to promote long-term financial independence.
- f) Upgrading bus stands, ensuring clean waiting areas, and improving connectivity to interior regions can further enhance accessibility and comfort, particularly for women from remote and economically weaker sections.
- g) Regular evaluation of the scheme's performance should be carried out to assess its socio-economic impact. Integrating the Shakti Scheme with other women empowerment and skill development initiatives can create broader and more sustainable outcomes.

#### Conclusion

The Karnataka State Road Transport Corporation (KSRTC) has been playing a dominant role in the tourism and economic development of the state by providing affordable transportation services to society, particularly to women through the free travel facility under the Shakti Scheme. This initiative ensures mobility, economic independence, and empowerment of women, especially those from rural and semi-urban areas. The study found notable improvements in economic participation, tourism, and employment opportunities for women. By reducing financial burdens, the scheme promotes women's socio-economic empowerment and inclusion. To maximize its impact, the government should strengthen transport infrastructure, ensure safety through the installation of CCTV cameras and the deployment of women conductors, and link the scheme employment and entrepreneurship initiatives. Continuous evaluation and policy integration will help sustain long-term benefits and further advance women's empowerment across Karnataka.

### Reference

- Aishwarya R, Paul SA, Pavithra G, Nagadeepa C. Empowerment euphoria and dark side of Shakthi Scheme in Karnataka. International Journal of Progressive Research in Engineering Management and Science. 2024;4(3):234-242.
- 2. Chiranjeevi VB, Giridhar KV. Role of KSRTC Shakthi Scheme on women empowerment A study. Journal of Emerging Technologies and Innovative Research. 2025;12(6):676-685.
- 3. Jyoti. Impact of free bus in Karnataka. International Journal of Creative Research Thoughts. 2025;13(3):550-563.
- Kanakamalini MA, Gopinath P. Karnataka's Shakti Scheme: Women reclaiming public spaces and mobility. In: 8th International Conference on Economic Growth and Sustainable Development: Emerging Trends. 2023. p. 1-12.
- 5. Kabade SB. The numerical study on Shakti Scheme after implementation in Karnataka. Journal of Emerging Technologies and Innovative Research. 2024;11(8):437-441.
- Nur Sabahiah AS, Airak S, Hassan SA. "More than a free bus ride" Exploring young adults' perceptions of free bus services using a qualitative approach: A case study of Penang, Malaysia. Sustainability. 2021;13:1-18.
- 7. Sharman MJ, Stanesby O, Jose KA, Greaves S, Cleland VJ. Free bus fares, bus use and physical activity: An exploratory cross-sectional study. Health Promotion

- Journal of Australia. 2024;36:e881:1-10.
- Umakanth S, Maheen P, Praneetha S, Dharewa C, Gupta S, Singh P. Empowering women's mobility and financial independence: A comprehensive study of the Karnataka Shakthi Scheme. International Journal of Research Publication and Reviews. 2024;5(3):6725-6737
- 9. Vijayakumar. A study on level of satisfaction towards Shakti Scheme (Free Bus Scheme) among women in Sira Taluk of Karnataka. Journal of Research & Development. 2025;17(6[I]):228-232.
- 10. Morgan K. Sample size determination using Krejcie and Morgan table. Kenya Projects Organization (KENPRO). 1970;38(1970):607-10.
- 11. Chadaga K, Prabhu S, Bhat V, Sampathila N, Umakanth S, Chadaga R. A decision support system for diagnosis of COVID-19 from non-COVID-19 influenza-like illness using explainable artificial intelligence. Bioengineering. 2023 Mar 31;10(4):439.
- 12. Yalla N, Mansani S, Reddy V, Bau PR, Mishra S, Behera C, Deb S, Chiranjeevi T, Krishna D, Adla V, Amarnath G. CIISCA 2023.