



DIGITAL PAYMENT BEHAVIOUR AMONG UNDERGRADUATE STUDENTS IN INDIA: AN EMPIRICAL STUDY OF UPI ADOPTION AND CASH DEPENDENCY

Manisha Syuni¹ & Vijaya Rajni² 

RESEARCH ARTICLE



Author Details:

¹ Research Intern, Noida, India;
² Associate Professor, College of
Vocational Studies, University of
Delhi, New Delhi, India

Corresponding Author:

Manisha Syuni

Abstract

This paper examines digital payments behaviour of undergraduate students in India including adaptation and the use of apps in their day-to-day life. The study is based on data returned by 143 students investigating patterns of usage across gender, year of study like freshers, second year and final year along with living arrangements like living with parents/families or independently/hostels. Tools applied for analyses include simple cross-tabulations along with advanced statistical tests like chi-square, Cramer's V and binary logistic regression. An important finding is that the year of study is the crucial factor affecting UPI adoption with highly significant chi square value being ($\chi^2 = 16.70$, $p < 0.001$). The effect was found to be moderate to strong (Cramer V=0.32), and the result is confirmed by the logistic regression model. In contrast to this gender pattern did not show any significant difference in UPI usage, suggesting gender neutrality in adoption of UPI usage. Living arrangement also did not exhibit much difference in UPI adoption but it showed difference in the reduced reliance on cash. Those students living independently were found to be using more of UPI and much less of cash. Overall, the findings suggest that while UPI adoption is now widespread among students of colleges located in Delhi and the intensity of cash replacement increases with academic progression among all gender irrespective of living arrangement. These incites have implications for fintech adoption strategies, campus banking infrastructure, and digital financial inclusion policy design in college student population.

DOI:

<https://doi.org/10.70096/tssr.260405019>

Keywords: UPI, Digital payment, Gender, Student behaviour, Financial independence

Introduction

Financial landscape of India's economy has been shaped by the structural transformation introduced by the National Payments Corporation of India's (NPCI) when in 2016 Unified Payments Interface was launched. By 2024, UPI recorded over 13 billion monthly transactions, seeping into people's everyday life. Undergraduate college students represent a demographic section who are transitioning to financial independence as they attain greater freedom in their lives in general and growing through adulthood and undertake more and more responsibility towards financial management. Their financial behaviour depends on many intersecting factors such as access to bank account, owning a smartphone, access to internet/wi-fi facility in the college premises and outside, popularity of the use of UPI apps including peer influence, campus infrastructure like accepting cash/online payments, and the type of financial support received from family.

Although UPI has been around for a decade, it is very important to understand how and why people adopt UPI, the patterns of adoption and the measures required to enhance their popularity for greater financial inclusion. Present paper is an attempt in this direction. This paper tries to understand the patterns in adoption of UPI among the undergraduate students. It is important to understand the behaviour of this cohort as they transition to full financial autonomy in their life cycle. Specific policies for financial inclusion can then be framed to create financial awareness which can lead to responsible financial inclusion in the early years of financial independence. This paper attempts to address this gap with the use of a structured primary survey, and analyse student behaviour through testing specific hypotheses constructed about demographic profile such as gender, year of study, and living arrangement.

Literature Review

As far as UPI payments are concerned, India is one of the global leaders in UPI payments. As of August 2023, UPI had facilitated over ten billion transactions (Dev et al., 2024). The process of digitalisation in India began in 1990s with the introduction of ATM machines and the debit cards. The adoption process was slow due to limited knowledge of new technology and

infrastructure. Its use was mainly concentrated in urban areas (Sandhu & Arora, 2022). The demonetisation of rupee in November 2016 marked a turning point in accelerating digital adoption, even though its pace continued to depend on improvements in banking access especially in rural areas and spread of mobile connectivity (Khalid & Ismail, 2019).

During the post-demonetisation phase, government of India pushed for digitalisation and many UPI-enabled applications were introduced which gradually encouraged users to incorporate digital payments into their routine transactions. Spread of Covid-19 virus further quickened the consumers into adoption of digital payment system through UPI and internet banking.

Arora et al. (2023) study based on Generation Z and Millennials, emphasized the role of education in the greater usage of digital payments. Rashmi and Anusha (2025) emphasize transaction volume and the perceived security of transactions as the main factors of UPI usage. Their study is based on 398 undergraduate students in Udupi and Dakshina Kannada. According to them female students are frequent users, and most respondents used UPI regularly for the purpose of mobile recharges, fee payments, and online shopping. More (2024) found that convenience was the primary motivation for UPI usage among respondents.

Hira and Mugenda (2000) reported gender-based differences in financial attitudes and spending behaviour, with women showing higher impulsive buying tendencies and men demonstrating greater interest in financial knowledge. Förster et al. (2018) found that young women exhibited lower levels of interest in financial matters such as banking and money management whereas men were found to be managing most money matters within and outside homes. Bhatia and Shete (2024) found household income as a significant predictor for frequent use of UPI where consumers with higher-income were more digitally aware and conscious as they were involved in considerable financial transactions.

Objectives

The main objective of this study is to:

- (1) examine the student profile of UPI adoption and usage intensity across gender, year of study, and living arrangement; and
- (2) examine whether there is a statistically significant association between these demographic variables and UPI usage, daily transaction frequency, and subjective cash dependency reduction.

Methods and Materials

The present study is based on primary survey conducted on undergraduate students studying in Delhi during the academic session 2024-25. Questionnaire was prepared and circulated online through google form. Questionnaire was self-administered by the students and a total of 143 usable responses were received across all three years of undergraduate study.

The questionnaire had various sections including questions related to demographic variables such as gender, year of study, and living arrangement. Questions were also framed to seek information about the financial infrastructural variables like ownership of bank account, UPI linkage, and ownership of credit/ debit card. Information was also collected about the UPI usage patterns including preferences about specific apps, frequency of use of UPI, weekly transaction volume and value. It also captured spending categories, payment modes across contexts, and respondents' self-assessment of whether UPI had reduced their cash dependency.

For hypothesis testing, three dependent variables were constructed: (a) UPI usage (b) usage frequency and (c) cash dependency reduction. The study employs Chi-square (χ^2) tests of independence to examine associations between demographic variables and related outcomes. It tested significance at $\alpha = 0.05$ level. It also conducts Cramer's V test to measure effect size and Binary Logistic Regression for the robustness check. PSPP software was used on raw response data for all comprehensive analysis of the relationships between variables.

Classification of Data

The 143 respondents were classified across three demographic dimensions. Table1 present the full classification of the sample. It is evident that Male respondents (n = 73) exhibit a slightly higher UPI adoption rate (87.6%) compared to female respondents (n = 70) at 80.0%. Overall, 83.9% of the sample are active UPI users.

Table 1: Classification of respondents by gender and UPI usage

Gender	UPI User	Non-UPI User	Total	UPI Adoption Rate
Female	56	14	70	80.00%
Male	64	09	73	87.60%
Total	120	23	143	83.90%

Table 2: Classification of respondents by year of study and UPI usage

Year of Study	Total	UPI Users	Non-UPI Users	UPI Rate
1st Year	35	23	12	65.70%
2nd Year	30	23	7	76.70%
Final Year	78	74	4	94.80%
Total	143	120	23	83.90%

Table 2 presents a strong progressive pattern according to the year of study. UPI adoption rises sharply from 65.7% among 1st-year students to 94.8% among final /third year students. First-year students account for the largest share of non-UPI users (12 of 23 non-users), largely because many have not yet formalised bank account linkages at the time of the survey and a significant number did not even have bank account at all.

Table 3: Classification of respondents by living arrangement and UPI usage

Living Arrangement	Total	UPI Users	Non-UPI Users	UPI Rate
Separately (Hostel/PG/Flat)	52	46	06	88.50%
With Parents	91	74	17	81.30%
Total	143	120	23	83.90%

Table 3 shows that students living independently have a marginally higher UPI adoption rate (88.5%) compared to those living with parents (81.3%). The difference is modest at the adoption level but becomes more pronounced when examining usage intensity and cash dependency, as shown in the hypothesis tests below.

Table 4: Cross-Classification: Gender × Year of Study × UPI Usage

Year	Female UPI	Female Non-UPI	Male UPI	Male Non-UPI	Total
1st Year	03	06	20	06	35
2nd Year	10	05	13	02	30
Final Year	43	03	31	01	78
Total	56	14	64	09	143

Table 4 depict that Final-year students have a very high adoption across genders (female 93.5%, male 96.9%). First-year students show lowest uptake, with similar non-user patterns across gender, indicating year of study as the key factor.

Table 5: UPI usage frequency by gender and living arrangement (among active UPI users)

Frequency	Female	Male	With Parents	Separately	Total
Daily	31 (55.30%)	41 (64.00%)	42 (56.80%)	30 (65.20%)	72 (60.00%)
Frequently	19 (33.30%)	14 (21.90%)	20 (27.00%)	13 (28.20%)	33 (27.50%)
Occasionally	05 (08.90%)	05 (07.80%)	08 (10.80%)	02 (04.30%)	10 (08.30%)
Rarely	01 (01.80%)	04 (06.25%)	04 (05.40%)	01 (02.10%)	05 (04.10%)
Total UPI	56	64	74	46	120

Male users show slightly higher daily usage (64.0%) than females (55.3%), but this is not statistically significant (H4). Independent students also show higher daily usage (65.2%) than those with parents (56.8%) (Table 5).

Table 6: Self-reported cash dependency reduction by gender, year of study and living arrangement.

Group	Category	Reduced	Not Reduced	Total	Percentage Reduced
Gender	Female	53	17	70	75.70%
Gender	Male	56	17	73	76.70%
Year	1st Year	24	11	35	68.60%
Year	2nd Year	19	11	30	63.30%
Year	Final Year	66	12	78	84.60%
Living	Separately	46	06	52	88.40%
Living	With Parents	63	28	91	69.20%

Cash reduction is highest among students living separately (88.4%) vs those with parents (69.2%), a gap of nearly 20%. Final-year students also report higher reduction (84.6%) than lower years. Gender differences are negligible (75.7% vs 76.7%) (Table 6).

Research Hypotheses

Eight null hypotheses (H0) were formulated to test associations between demographic classifiers and payment behaviour outcomes (Table 7). Each is tested using Pearson's chi-square statistic (χ^2). The alternative hypothesis (H1) in each case posits that the two variables are not independent, i.e., that the demographic variable significantly influences payment behaviour.

Table 7: Research Hypotheses

Hypothesis	H0 (Null)	H1 (Alternative)	Test Variable
H1	Gender and UPI Usage are independent	Gender influences UPI adoption	Gender × UPI (Yes/No)

H2	Year of study and UPI Usage are independent	Year of study influences UPI adoption	Year × UPI (Yes/No)
H3	Living arrangement and UPI Usage are independent	Living arrangement influences UPI adoption	Living x UPI (Yes/No)
H4	Gender and daily UPI frequency are independent	Gender influences frequency of UPI use	Gender × Daily (Yes/No)
H5	Living arrangement and daily UPI frequency are independent	Living arrangement influences UPI frequency	Living x daily (Yes/No)
H6	Gender and cash reduction are independent	Gender influences cash dependency reduction	Gender × Cash (Reduced) (Yes/No)
H7	Year of study and cash reduction are independent	Year of study influences cash displacement	Year × Cash (Reduced) (Yes/No)
H8	Living arrangement and cash reduction are independent	Living arrangement influences cash displacement	Living × Cash (Reduced) (Yes/No)

Results

Contingency Tables

The following contingency tables present the observed frequencies used in selected chi-square test.

Note: The contingency tables for H4, H5, and H6 are not presented separately, as the observed frequencies for these hypotheses are already included in the classification tables (Table 5 and Table 6). To avoid duplication, these tables are directly used for the chi-square analysis.

Table 8: H1-Observed frequencies — Gender × UPI Usage

Gender	UPI User	Non-UPI User	Row Total
Female	56	14	70
Male	64	09	73
Column Total	120	23	143

Table 9: H2- Observed frequencies — Year of Study × UPI Usage

Year	UPI User	Non-UPI User	Row Total
1 st Year	23	12	35
2 nd Year	23	07	30
Final Year	74	04	78
Column Total	120	23	143

Table 10: H3- Observed frequencies — Living Arrangement × UPI Usage

Living Arrangement	UPI User	Non-UPI User	Row Total
Separately	46	06	52
With parents	74	17	91
Column Total	120	23	143

Table 11: H7- Observed frequencies — Year of Study × Cash Dependency Reduction (4th year excluded due to n=2)

Year	Reduced	Not Reduced	Row Total
1 st Year	24	11	35
2 nd Year	19	11	30
Final Year	66	12	78
Column Total	109	34	143

Table 12: H8- Observed frequencies — Living Arrangement × Cash Dependency Reduction

Living Arrangement	Reduced	Not reduced	Row Total
Separately	46	06	52
With parents	63	28	91
Column	109	34	143

Chi-Square Test Results

The table below presents the chi-square statistic, degrees of freedom, p-value, and decision for each of the eight hypotheses.

Table 13: Chi-square Output summary (statistically significant association at $\alpha = 0.05$)

Hypothesis	Variables Tested	χ^2 Value	df	p-Value	Decision($\alpha = 0.05$)
H1	Gender $\times$ UPI Usage	01.56	1	0.212	Accept H0
H2	Year of Study $\times$ UPI Usage	16.70	2	0.000	Reject H0
H3	Living Arrangement $\times$ UPI Usage	01.25	1	0.263	Accept H0
H4	Gender $\times$ Daily UPI Frequency	02.02	1	0.156	Accept H0
H5	Living Arr. $\times$ Daily UPI Frequency	01.76	1	0.184	Accept H0
H6	Gender $\times$ Cash Reduction	00.02	1	0.889	Accept H0
H7	Year of Study $\times$ Cash Reduction	06.91	2	0.032	Reject H0
H8	Living Arrangement $\times$ Cash Reduction	06.75	1	0.009	Reject H0

Cramer's V Test Results

Table 14: Cramer's V Effect size

Hypothesis	Variables Tested	Effect Size Cramer V	Strength
H1	Gender $\times$ UPI Usage	0.10	Very weak
H2	Year of Study $\times$ UPI Usage	0.32	Moderate- strong
H3	Living Arrangement $\times$ UPI Usage	0.09	Very weak
H4	Gender $\times$ Daily UPI Frequency	0.12	weak
H5	Living Arr. $\times$ Daily UPI Frequency	0.11	weak
H6	Gender $\times$ Cash Reduction	0.01	Very weak
H7	Year of Study $\times$ Cash Reduction	0.21	Moderate
H8	Living Arrangement $\times$ Cash Reduction	0.21	Moderate

Binary Logistic Regression Test Results

Table 15: Effect of predictors on UPI-related behaviour at $\alpha = 0.05$

Hypot heses	Independent Variable	Dependent variable	Coefficie nt (B)	Standard Error	Significance	Expected (B)	Results
H1	Gender	UPI Usage	0.58	0.46	0.216	1.78	Rejected
H2	Year of Study	UPI Usage	-2.27/- 1.73	0.62/0.67	0.000/0.010	0.10/0.18	Accepted
H3	Living Arrangement	UPI Usage	-0.57	0.51	0.268	0.57	Rejected
H4	Gender	Daily Usage	0.48	0.34	0.157	1.61	Rejected
H5	Living Arrangement	Daily Usage	-0.46	0.35	0.186	0.63	Rejected
H6	Gender	Cash reduction	0.06	0.39	0.889	1.06	Rejected
H7	Year of Study	Cash reduction	-.92/- 1.16	0.48/0.49	0.054/0.019	0.40/0.31	Partially accepted
H8	Living Arrangement	Cash reduction	-1.23	0.49	0.012	0.29	Accepted

Analysis of Results

H1 — Gender and UPI Usage: The chi square results testing independence of gender and UPI usage returned as statistically significant and the hypotheses is retained at 5% level of significance suggesting gender is not a significant variable in UPI adaptation (Table 13). Although male students had marginally higher adoption rate of UPI, Cramer's V output testing effect size shows that the difference is minor and the association is weak (Table 14). Binary logistic regression also confirms the results presented in Table 15. All three analytical techniques confirming same results proves that results are robust and it can be safely concluded that gender does not play a meaningful role in influencing UPI adoption among the undergraduate students studying in Delhi. The analyses indicate near universal adoption of UPI.

H2 — Year of Study and UPI Usage: The chi square results testing independence of year of study and UPI usage is rejected and shows a highly significant association between Year of study and UPI usage (Table 13). This points out that as students'

academically progress, their exposure to digital platforms increases and therefore students in second and third years adopt more and more of UPI transactions. This relationship comes out as strong to moderate as shown by Cramer's V results (Table 14). Table 15 presenting Binary logistic output also confirms the same results. Peer influence, greater familiarity and experience lead to increased financial independence resulting in higher transaction among senior students. As more and more ease is acquired through experience UPI transactions to shift from an optional tool to a routine mode of payment.

H3 — Living Arrangement and UPI Usage: In Delhi colleges, there is a significant number of outstation students and therefore we constructed the hypotheses to test the financial behaviour of students living with parents and living independently. Chi square result is surprising and yield an output where null hypotheses is accepted meaning behaviour of students in UPI adoption is not different and is not dependent on living arrangement (Table 13). Table 14 depicting Cramer's V results show a weak association between the two reflecting near equal popularity of UPI usage among the students living independently or with families. Binary logistic results confirm above results (Table 15). We can safely conclude that UPI usage is consistent across different living arrangements.

H4 — Gender and Daily UPI Frequency: Similar to H1, H4 (Table 7) also yield no significant difference in the frequency of UPI usage among male and female students. All three results shown in Table 13, 14 and 15 confirm the same findings and we can safely conclude that frequency of UPI usage is similar in both genders. There may be minor variations but the outcomes does not establish a consistent pattern with frequency likely influenced more by individual spending habits than by gender.

H5 — Living Arrangement and Daily UPI Frequency: Again, similar to H3, H5 (Table 7) also shows no statistical difference in the frequency of UPI usage among the students living with parents or living independently. All three tools used and result shown in Table 13, 14 and 15 are complementary and confirm the fact that daily usage patterns are not shaped by living arrangement of a student. The association was found to be weak reflecting frequency of use is more a matter of personal routine and financial behaviour rather than any residential arrangement.

H6 — Gender and Cash Dependency Reduction: H6 which test the relationship between gender and the cash dependency reduction also yield results which are consistent with H1 and H4 outcomes (Table 7). There is no significant relationship between gender and reduction in cash dependency (Table 13, 14, 15). This completes the story telling us UPI adoption, frequency of its usage and reduction in cash dependency are all similar across genders. This further confirms the universal acceptance of UPI as a financial tool which facilitate financial transactions for all genders.

H7 — Year of Study and Cash Dependency Reduction: Similar to H2, H7 (Table 7) also yield that the year of study and cash dependency reduction are related and null hypotheses is rejected (Table 13). Cramer's V (Table 14) shows a moderate relationship between the two and logistic regression also confirms the same finding (Table 15). The moderate association indicates a gradual shift in the behaviour of students as they academically progress with sharp jumps.

H8 — Living Arrangement and Cash Dependency Reduction: The null hypotheses showing independence of living arrangement and cash dependency reduction is rejected (Table 13). Acceptance of alternative hypotheses confirms that living arrangement plays a meaningful role in shaping cashless behaviour among students. Those living independently show greater cashless behaviour as compared to those living with family.

UPI Adoption and App Preferences

Table 16: Preferred UPI application among active UPI users (App Market Share)

UPI Application	Users (approximately)	Percentage of UPI Users
Google Pay	46	38.30
Paytm	34	28.30
PhonePe	19	15.80
BHIM UPI	05	04.10
Fampay	08	06.70
Others	08	06.70
Total	120	100

Table 16 summarizes the distribution of applications (apps) among active users of UPI. The three most important apps which account for more than 80 percent of market share among all the apps used by students are Google Pay, Paytm and PhonePe. The remaining share is distributed across other apps. The pattern shows a clear concentration of UPI apps usages indicating strong peer influence and demonstration effect. The specific reasons for the popularity of few app stems from ease of use, additional features like rewards, discounts and cash back. Overall, the findings suggest herd behaviour is common among students and their decisions are guided by social influence where students conform to the social norms. Table 17 present the transaction metrics of students. It reports that on an average a student made 20 transactions in a week. Most common transaction value is Rupee 100-200 and most of the personal expenditure is on food and travel.

Table 17: Summary of UPI transaction behaviour metrics

Metric	Finding
Daily UPI users	60% of active UPI users

Most common weekly transaction volume	More than 20 transactions (20% of users)
Most common transaction value	₹100–₹200 (69.1% of users)
High-frequency users (+16 transactions /week)	33.3% of active UPI users
Primary spending context	College canteen (68%), Metro travel (58%)
Preferred overall mode	UPI (reported by 83.3% as primary preference)

Discussion of Result

- Out of the three demographic variables 1) Gender 2) year of study and 3) Living arrangement studied to find the patterns in the adoption, frequency of usage and reduction in cash dependency, Year of study comes out as the most important variable. It is found that UPI adoption curve moves slowly for freshers and become faster as they academically progress to second or third year. Speed of adoption increase by more than three times as the student reach in final year. It raises a crucial question of financial literacy that must be addressed by the educational institutions for the freshers.
- **Gender Neutrality of UPI Adoption:** Second most important finding of this study is that we found no significant gender difference in the adoption, frequency or reduction in cash dependency. All three Null hypotheses H1, H4 and H6 were accepted and the results are robust. In the existing literature, it has been pointed out that females are less aware of financial matters and their engagement with technology is also limited. For instance, Förster et al. (2018) found that young women tend to have lower levels of financial knowledge across areas such as banking and money management. In contrast to this present study found no significant difference in the behaviour of females and males in the matters of UPI adoption. As a result, we can conclude that behavioural differences linked to gender appear to be less pronounced in UPI adoption particularly in Delhi colleges among undergraduate population.
- **Living Arrangement and the Intensity of Displacement:** Thirdly, living independently or with parents does not significantly affect whether students adopt UPI (H3), but it does influence degree of cash replacement (H8). This difference is worth elaborating. Adoption seems to be near universal among students having bank accounts, regardless of their living arrangement. However, students living independently are showing greater cashless behaviour as they have to have greater number of transactions and they manage all of their expenses on their own. It can be concluded that the process has two stages. First, adoption of UPI which is driven by social influence and environment and second, frequency of usage and reduction in cash dependency which is affected by deeper financial responsibility and lifestyle.
- **The First-Year Inclusion Gap:** The finding that more than one third of first-year students are non-UPI users indicate a clear and actionable gap in early-stage adoption of UPI. This gap is not due to conscious resistance or lack of interest but is due to limited financial literacy and the knowledge of local infrastructure and therefore they are delayed to enter into the UPI ecosystem. Many freshers are in the transitional phase, adjusting to a new environment, managing finances independently for the first time, and in some cases, still relying on existing family-linked financial arrangements. The constraint seems to be structural rather than behavioural. Even where awareness is present, the absence of a fully set-up financial infrastructure and the dissemination of the knowledge can delay adoption.
- This issue could be addressed in a relatively straightforward manner. Institutions can intervene and create atmosphere and spread knowledge through orientation sessions at the start of the academic year, form groups with contact persons to provide guided assistance for bank account setup, and early exposure to UPI applications. All this could reduce initial barriers and help accelerate adoption process among freshers and lead them to fast and early transition to UPI adoption.

Conclusion

This study analyses digital payment behaviour among undergraduate students in colleges located in Delhi. It is based on primary survey of 143 students and the data is analysed using descriptive statistics, cross-tabulation and the sophisticated statistical tools such as chi-square analysis, Cramer's V, and binary logistic regression.

There are three key findings of the study. Year of study returned as the most important determinant of UPI adoption rates with chi square value of 16.70 which is significant at 1 percent level of significance. It was found that UPI adoption rate was 65 percent for freshers in contrast to 95 percent adoption rate among the senior students. This indicates how access to formal banking and familiarity with digital tools tends to develop over time during college years along with greater exposure towards digital literacy and learning with peer groups.

Secondly, gender did not show any significant relationship with any payment behaviour, including UPI adoption, usage frequency, and cash displacement. This finding is in contrast to the stereotypical view that females are relatively less aware about financial matters and therefore they are reluctant users of technology. It can be safely concluded that awareness about the technology and the use of UPI for financial transactions is equally popular among males and females for the present generation. The findings also indicate that when access conditions are similar, gender-based differences in financial behaviour may become less pronounced.

Third, as far as UPI adoption rates are concerned, living arrangement is not a significant factor. Although it does affect cash dependency reduction. Students living independently significantly reduce their reliance on cash due to greater volume of transaction on a daily basis.

Overall, the findings suggest that access and experience play a more important role than basic demographic factors in shaping digital payment behaviour which is also reflected in the first-year inclusion gap, where a notable proportion of students remain outside the UPI eco-system in the initial stage due to structural constraints.

The findings of the present study also open several directions for further research. Similar studies could be done on a larger sample and include different age groups, rural populations, or working professionals, which would help in assessing patterns and behaviour of larger populations. Also, similar study could be done with more identifying demographic variables such as size of family income, monthly expenditure, digital literacy, and access to financial services which will provide more detailed understanding of adoption behaviour.

Secondly, longitudinal studies could also be conducted to understand the evolution of UPI usage over time within the same group, especially as financial independence increases. In addition to data collected through questionnaire understanding may be enhanced by adopting qualitative approaches such as personal interviews or user experience studies.

Finally, research could also be conducted to evaluate the impact of institutional initiatives to address the issue, such as campus-level counselling or forming support groups for digital literacy or spreading infrastructural facilities in reducing early-stage gaps in adoption. This would strengthen our academic understanding along with suggest practical implications for improving digital financial inclusion.

Acknowledgment: No

Author's Contribution: *Manisha Syuni:* Data Collection, Literature Review, Methodology, Analysis, Drafting, References; *Vijaya Rajni:* Data Collection, Literature Review, Methodology, Analysis, Drafting, References

Funding: No

Declaration: The author/s has/have given consent for the publication.

Competing Interest: No

References

1. Arora, A. K., Panchal, A., Gupta, V. P., & Sharma, D. (2023). Digital payment apps: Perception and adoption—A study of higher education students. *International Journal of Enterprise Network Management*, 14(1–2), 122–138.
2. Bhatia, R., & Shete, V. (2024). Usage of UPI transaction and its challenges—A study on Gen Z and millennials. *Man and Development*, 46(4), 108–119.
3. Dev, H., Gupta, R., & Kumar, D. (2024). From cash to cashless: UPI's impact on spending behaviour among Indian users. In *Extended abstracts of the CHI conference on human factors in computing systems* (pp. 1–10).
4. Förster, M., Happ, R., & Maur, A. (2018). The relationship among gender, interest in financial topics and understanding of personal finance. *Empirische Pädagogik*, 32(3), 293–309.
5. Hira, T. K., & Mugenda, O. (2000). Gender differences in financial perceptions, behaviours and satisfaction. *Journal of Financial Planning*, 13(2), 86–93.
6. Khalid, N., & Ismail, S. (2019). Demonetisation in India: A push for digitalisation. *Research Journal (Arts)*, 34.
7. More, R. S. (2024). *Understanding factors influencing UPI (Unified Payments Interface) user adoption levels and sentiments in India* [Doctoral dissertation, National College of Ireland].
8. National Payments Corporation of India. (n.d.). *UPI (Unified Payments Interface)*. <https://www.npci.org.in/product/upi>
9. Rashmi, A., & Anusha, M. (2025). UPI in the minds of young consumers: Awareness and usage intention among undergraduate students of Mangalore University. *International Journal of Science and Management Studies*, 40–47.
10. Sandhu, S., & Arora, S. (2022). Customers' usage behaviour of e-banking services: Interplay of electronic banking and traditional banking. *International Journal of Finance & Economics*, 27(2), 2169–2181.

Publisher's Note

The Social Science Review A Multidisciplinary Journal remains neutral with regard to jurisdictional claims in published data, map and institutional affiliations.

©The Author(s) 2026. Open Access.

This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>