



**“UPI as a Tool for Financial Inclusion: Adoption Trends Among Females in Junagadh District”**

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**Abstract:**

The rise of digital payment systems has revolutionized financial transactions in India, promoting ease, efficiency, and accessibility. Unified Payments Interface (UPI), as a key driver of this transformation, has played a significant role in enhancing digital financial inclusion across various demographics. This study examines the adoption and usage of UPI among females in Junagadh, Gujarat, based on data collected from 125 respondents across different areas using a structured questionnaire. The research focuses on identifying key factors influencing UPI adoption, evaluating satisfaction levels, and uncovering challenges faced by females in using digital payment systems.

The findings reveal that socio-economic status, digital literacy, perceived ease of use, and trust in digital payments significantly affect UPI adoption among females. While a majority of respondents expressed satisfaction with the convenience and speed of UPI transactions, challenges such as inadequate digital literacy, technical issues, and concerns over cybersecurity were highlighted. The study emphasizes the need for targeted awareness campaigns and training programs to address these barriers and enhance women's participation in digital payment systems. By offering insights into the behavioral patterns and obstacles faced by females in adopting UPI, this research contributes to the broader understanding of financial empowerment and digital inclusion in semi-urban and rural areas of India.

**Keywords:** *UPI(Unified payment interface), digital inclusion, females, financial empowerment.*

**Introduction:**

The advent of digital payment systems has transformed the financial landscape in India, providing individuals with fast, secure, and efficient modes of transaction. Among these systems, the Unified Payments Interface (UPI), launched by the National Payments Corporation of India (NPCI) in 2016, has emerged as a cornerstone of the country's digital economy. With its user-friendly interface, interoperability across banks, and real-time



transaction capabilities, UPI has significantly contributed to the promotion of digital financial inclusion, especially in rural and semi-urban areas.

However, despite the rapid adoption of UPI across the nation, gender disparities in digital financial usage persist. Women, particularly in rural regions, often face barriers such as limited access to digital devices, lack of digital literacy, and apprehensions about security and fraud. Addressing these challenges is crucial for ensuring equitable participation of women in the digital economy and fostering their financial independence.

This study focuses on the adoption and usage of UPI by females in Junagadh, Gujarat, a semi-urban district with a diverse demographic profile. By collecting data from 125 respondents through a structured questionnaire, the research aims to analyze key factors influencing UPI adoption, assess satisfaction levels, and identify challenges faced by female in using digital payment systems.

Understanding these dynamics is critical for designing targeted interventions to bridge the gender gap in digital financial inclusion. This research seeks to contribute to the ongoing discourse on women's financial empowerment by offering actionable insights into the behavioral patterns and obstacles influencing UPI adoption among females in Junagadh. The findings are expected to aid policymakers, financial institutions, and stakeholders in developing effective strategies to enhance digital literacy and promote UPI usage among women in rural and semi-urban areas.

### **Objective of the Study:**

1. To analyse the level of awareness about UPI among women in Junagadh district.
2. To study the factors that influence women to adopt and use UPI.
3. To identify the challenges faced by women in accessing and using UPI.
4. To evaluate satisfaction level of UPI based on various factors among Female.

### **Review of Literature:**

**Dr. M.N. Prakasha (2023)** “A study on Unified Payment Interface (UPI) among university students in Madikeri City”, it was found that most students preferred using digital payment systems, with 93.33% showing awareness of its benefits. However, only 47.5% had average knowledge about the UPI payment system, indicating a need for increased education on this topic. The research highlighted that Google Pay was the most popular app at 50.83%, followed by PhonePe at 34.17%. This study emphasizes the importance of promoting awareness and understanding of digital payment systems like UPI among students to further encourage their adoption and usage in the digital economy.

**Ajmera, Hiteshi. (2023)** “A Study on Factors Affecting Consumer Attitude and Intention Towards Mobile Payment Applications in Gujarat.” In this study, she looked at how different things like how easy a mobile



payment app is to use, what benefits it offers, and how secure it is can affect whether people want to use it or not. They also considered factors like company image and social influence. The researchers also checked how things like gender, income, and education can change how people feel about using mobile payment apps. By using tools like SPSS and PLSSEM software, they were able to see the direct and moderating effects of these factors. This study helps us understand better why people choose to use mobile payment apps and can give ideas to companies and policymakers on how to make these apps more appealing to users.

**V. Sanjai, and Dr.Tr.Kalai Lakshmi (2021)** “*A Study on Usage of Online Payment Apps by Customers*” looked at how people in Chennai use online payment apps. They asked 120 people, mostly students, to fill out a questionnaire online. They also read information from websites and journals to learn more about online payments. They used fancy-sounding tests like Chi-Square and Anova to understand the data. The study found that most people were happy with online payment apps. This research is important because it helps us know more about how online payments work and how we can use them without any problems.

**N. Hariharan and K. Divya, (2021)** “*A research on mobile payment application in customer preference on Madurai District*”, conducted the researchers aimed to investigate the level of satisfaction among users and their preferences towards mobile payment applications. Through a structured questionnaire, a sample of 223 respondents from Madurai District was selected for analysis using statistical tools such as simple percentages, scaling techniques, and ranking methods. The findings of the study suggest a gradual increase in customer satisfaction towards mobile payment applications, highlighting the growing importance and acceptance of mobile payment methods in the region. This research contributes valuable insights into the evolving landscape of mobile payments and user preferences, shedding light on the factors influencing customer satisfaction in the context of mobile financial transactions.

**Dhanamalar M., Preethi S., and Yuvashree S. (2020)** The research paper “*Impact of Digitization on Women’s Empowerment: A Study of Rural and Urban Regions in India*” shows that rural women in India face challenges in using technology compared to urban women. The study suggests that programs like the “Internet Saathi” project can help rural women learn digital skills. It is important to provide support to rural women to bridge the technology gap between rural and urban areas. This research highlights the potential of technology to empower women and promote gender equality in India.

**Bijin Philip (2019)** In the research about “*Unified Payment Interface (UPI) and its impact on customer satisfaction*”, it was shown that people with more education, especially those who have studied beyond matriculation and are comfortable using the internet, are more likely to use digital payment methods. The study also pointed out that areas with higher education levels, like Delhi NCR and big cities, are more open to using digital payments. Additionally, the rise in smartphone usage and internet availability in these regions has made it easier for people to adopt digital payment services such as UPI. This research suggests that there



is a connection between customers' education levels and their interest in using UPI, highlighting the changing trends in digital transactions in India.

**Divya Budhia and Dr. Tushinder Preet Kaur (2019)**, study on *“Factors Influencing the Use of online payment systems by Women”* in urban areas of Punjab aimed to identify the key factors affecting the adoption of online payment methods by females. The research gathered data from 300 respondents and used factor analysis to condense the variables into four broad factors: convenience, lack of safety, modernity, and economic benefits. The findings indicated that significant differences existed between users and non-users, particularly in terms of convenience and economic benefits. This suggests that these factors play a crucial role in influencing non-users to become users of online payment systems. The study is valuable for policymakers as it provides insights that can be used to promote the use of online payment systems among women in urban areas of Punjab, ultimately contributing to the advancement of “Digital India.”

### **Hypothesis of the Study:**

**H<sub>0</sub>1:** There is no significant level of awareness about UPI among female in the Junagadh district.

**H<sub>0</sub>2:** Socio-demographic factors such as age, education, income, and occupation do not significantly influence the adoption of UPI among female in Junagadh.

**H<sub>0</sub>3:** Female in Junagadh district do not face significant challenges in accessing and using UPI.

**H<sub>0</sub>4:** The level of satisfaction with UPI services among female in Junagadh is not significantly influenced by factors such as convenience, security, and customer support.

### **Research Methodology:**

#### **A. Identification of the problem:**

The Indian government is working to make the country more digital and reduce the use of cash by encouraging online payments. Digital payments are safe if people follow the rules, but they can lead to big losses if not used carefully. This study focuses on understanding how females in Junagadh district adopted and perceived about UPI.

#### **B. Research design:**

This study employs a survey-based approach and adopts a descriptive research design. Primary data has been gathered through a structured questionnaire covering demographic details such as age, educational qualifications, marital status, and occupation. The survey collected responses regarding their usage patterns, factors influencing app adoption, and the problems they encounter. The secondary data was sourced from online platforms, journals, and reports.



### **C. Sample size and Technique:**

The sample size consists of 125 female respondents.

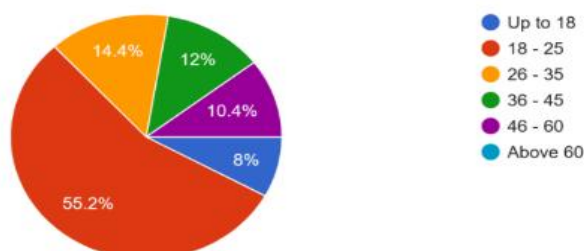
The study used a non-probability convenience sampling method for participant selection. Simple tools such as percentages and graphical representations were employed to analyze and present the findings.

### **Data Analysis and Findings:**

**Table no. 1: Age of Respondents**

Age	Frequency	Percentage
Below 18 years	10	8%
18 - 25 years	69	55.22%
26 – 35 years	18	14.4%
36 – 45 years	15	12%
46 – 60 years	13	10.4%
Above 60 years	00	00%

Age  
125 responses



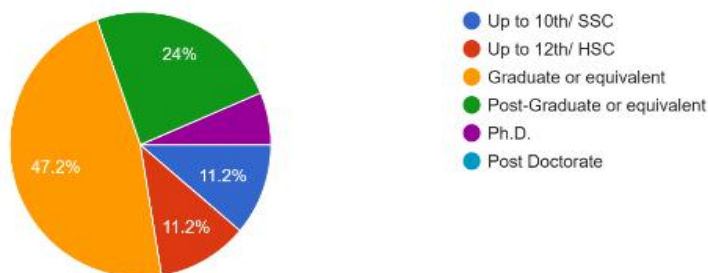
As per the age group classification, Majority of respondents 55.2 percent are between age group of 18-25 years, 8 percent of respondents are below the age of 18, 14.4 percent of respondents are between the age group of 26-35 years, 22.4 percent of respondent are between age group of 36-60 years.



**Table no. 2: Education qualification of respondents**

Education qualification	Frequency	Percentage
10 <sup>th</sup> / SSC	14	11.2%
12 <sup>TH</sup> / HSC	14	11.2%
Graduate or equivalent	59	47.2%
Post graduate or equivalent	30	24%
Ph.D.	8	6.4%
Post Doctorate	0	00%

Education (highest qualification)  
125 responses



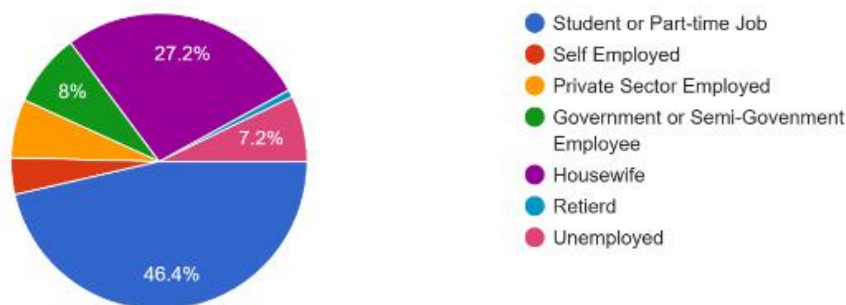
As per the education qualification out of 125 respondents, 22.4 percent of respondent are Up to SSC/HSC, 47.2 percent of respondent have completed Graduation, 24 percent of respondent have completed Post Graduation, and small number of professional course 6.4 percent of the respondent have completed doctoral degree.

**Table no. 3: Occupation of respondents**

Occupation	Frequency	Percentage
Student / Part-time job	58	46.4%
Self Employed	5	4%
Private sector employed	8	6.4%
Govt. or semi-govt.	10	8%
Housewife	34	27.2%
Retired	1	0.8%
Unemployed	9	7.2%



Occupation  
125 responses

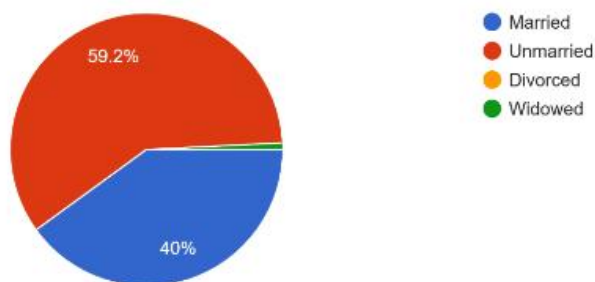


As per the occupation out of 125 respondents, majority of respondent that is 46.4% are student, 27.2 percent are housewife, 8 percent are government or semi-government employee, 7.2 percent are unemployed, 6.4 percent are private sector employee, 4 percent are self employed and 0.8 percent is retired.

**Table no. 4: Marital status of respondents**

Marital status	Frequency	Percentage
Married	74	59.2%
Unmarried	50	40%
Divorced	00	0%
Widowed	01	0.8%

Marital Status  
125 responses



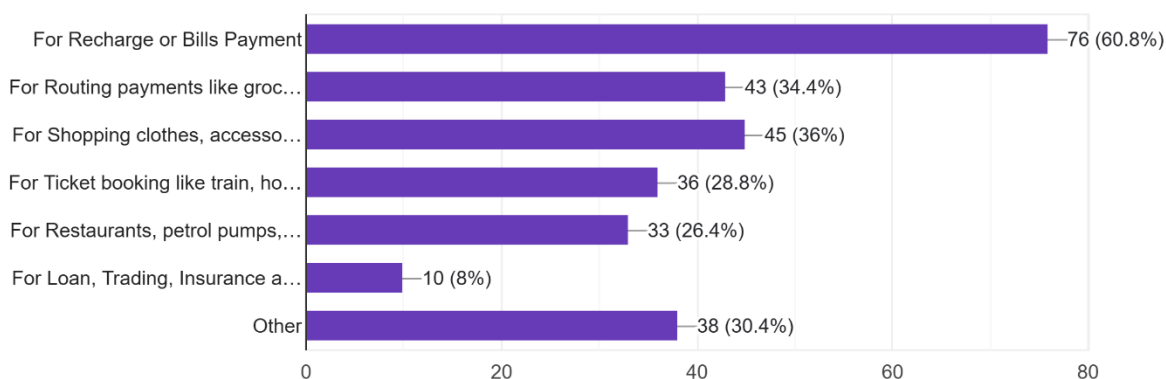
As per the marital status we can see that 59.2 percent females are unmarried and 40 percent female are married and 0.8 percent are widowed.





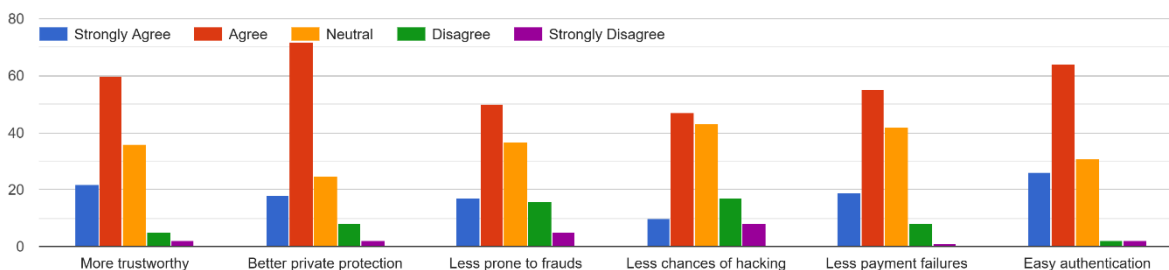
For what purpose do you like to use Digital payments through UPI Applications?

125 responses



The above chart illustrates the purposes for which 125 respondents use UPI applications for digital payments. The most common use is **recharge or bill payments**, with 60.8% (76 responses), followed by **shopping** (36%) and **grocery payments** (34.4%). **Ticket booking** accounts for 28.8% of responses, while **restaurants and petrol pumps** constitute 26.4%. The least common purpose is **loan, trading, and insurance payments**, with only 8% (10 responses). Interestingly, 30.4% (38 responses) fall into the "Other" category, highlighting diverse or unspecified uses. Overall, the data emphasizes UPI's popularity for routine transactions like bill payments and shopping, with limited use for financial services.

Security perception of UPI digital transactions compared to traditional methods.



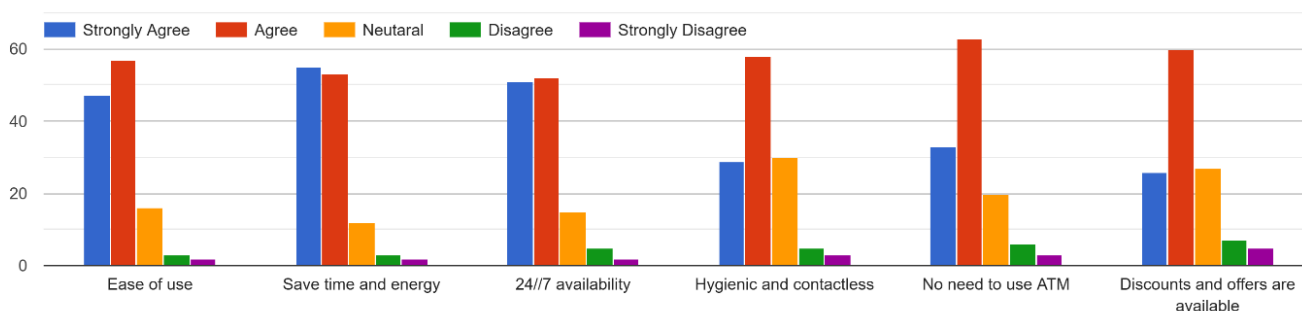
The above chart illustrates respondents' security perceptions of UPI digital transactions compared to traditional methods across six dimensions: trustworthiness, privacy protection, fraud prevention, hacking risks, payment reliability, and authentication ease. For most categories, the majority of respondents either **agree** or are **neutral** about UPI's security benefits. **Better private protection** and **easy authentication** receive the highest agreement levels, with many respondents strongly agreeing or agreeing. In contrast, perceptions of being **less prone to fraud** and **less chances of hacking** show relatively balanced distributions across agree, neutral, and





disagree responses. Negative perceptions (disagree and strongly disagree) are minimal in all categories, highlighting overall confidence in UPI's security features compared to traditional methods.

Satisfaction perception of UPI digital transaction compared to traditional methods.



The above chart showcases respondents' satisfaction with UPI digital transactions compared to traditional methods across six factors: **ease of use**, **time and energy savings**, **24/7 availability**, **hygienic and contactless transactions**, **no need to use ATMs**, and **availability of discounts and offers**. For all factors, the majority of respondents either **strongly agree** or **agree**, reflecting a high level of satisfaction. **Ease of use** and **time and energy savings** stand out, with significant strong agreement. **24/7 availability** and **hygienic, contactless transactions** also receive notable positive responses. Fewer respondents express disagreement or strong disagreement across all categories, indicating that UPI is generally viewed as a convenient and satisfying alternative to traditional transaction methods.

#### **Suggestion and recommendation:**

The study of UPI as a tool for financial inclusion: adoption trends among females in junagadh district, is critical for financial inclusion and empowering females. Here are some suggestions and recommendations to help them become more aware of and adoption of UPI.

1. Organize interactive workshopes in local communities to help females gain confidence in using UPI apps.
2. Offer practical demonstrations and training on using common UPI tools that relavent to females.
3. Develop UPI apps and platforms that support regional language commonly used by females.
4. Deploy vans to visit different areas, providing education on the benefits, safety, and security of UPI systems.
5. Hold campaigns to teach female to avoid scams and keep their information safe.



### **Conclusion:**

This study explored the use and understanding of UPI system among females of Junagadh district. It found that female's awareness about UPI was average, highlighting the need for better education to promote their use. The study also looked at female's attitudes towards

UPI. While some appreciated the convenience and efficiency, others raised concerns, especially about security and technology skills.

The study emphasizes the importance of increasing female's awareness and knowledge about UPI in Junagadh District. By addressing the factors influencing adoption and considering female's views, policymakers and stakeholders can encourage more females to use UPI. This will help them enjoy the benefits of a cashless economy while ensuring inclusivity and equal access to financial services.

### **A. Limitation of the Study:**

1. The study focused only on the Junagadh District.
2. Data was collected using questionnaires, which could be influenced by personal biases.
3. The sample size was limited to 125 respondents, which may not fully represent the broader population.

### **B. Scope of the Study:**

1. Similar studies can be done with different sample size or groups for other new technologies.
2. The research can be expanded to other districts or states to understand the broader impact of UPI adoption.

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