A Study on Impact of Digital Payment Apps in Spending Behavior of Rural People in Puducherry

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ABSTRACT
The rapid growth of digital payment applications has significantly changed the way people make financial transactions and manage their spending. This study examines the impact of digital payment apps on the spending behaviour of users, with special focus on middle-class consumers. The research analyses how features such as ease of payment, cashback offers, and transaction records influence spending patterns. The study is based on both primary data collected through structured questionnaires and secondary data gathered from journals, articles, and previous research studies. The findings reveal noticeable changes in spending behaviour, including increased transaction frequency and convenience-driven purchases. While digital payment apps support easy and secure payments, challenges remain in controlling impulsive spending. The study concludes that responsible use of digital payment apps and improved financial awareness are essential for maintaining healthy spending habits.
Keywords: Digital Payment Apps, Spending Behaviour, Cashless Transactions, Consumer Finance, Financial Awareness

I. INTRODUCTION

Digital payment applications have become an important part of the modern financial system. With the growth of smartphones and internet access, people increasingly use digital payment apps for daily transactions such as shopping, bill payments, money transfers, and online services. These apps provide convenience, speed, and security, making them a preferred mode of payment compared to cash transactions.

The widespread use of digital payment apps has also influenced the spending behaviour of users. Since payments can be made easily without using physical cash, users may spend money more frequently and sometimes without proper planning. At the same time, features like transaction history, spending summaries, and alerts help users track and manage their expenses. This study examines how digital payment apps affect the spending behaviour of users, with special focus on middle-class consumers, and analyses whether these apps encourage higher spending or support better financial management

OBJECTIVES OF THE STUDY

2.1 PRIMARY OBJECTIVE

- To Study on the Impact of Digital Payment Apps on Spending Behaviour of Rural People in Puducherry

2.2 SECONDARY OBJECTIVES

- To identify the factor that Influencing the Spending Behavior in individual
- To study the changes in spending behavior after using Digital Payment apps
- To examine whether digital payment apps help users in controlling his expenditure
- To Provide suggestion for better use of digital apps in managing their Spending Patterns

III. REVIEW OF THE LITERATURE

3.1 Fatma, A. (2020). Impact of Digital Payment Systems on Consumer Buying Behaviour in Developing Economies. Journal of Digital Finance Studies.

This study explains how digital payment systems have changed consumer buying behaviour in developing economies.

The author highlights that digital payments are preferred due to their convenience, speed, and safety. The study shows that easy access to digital payments increases purchase frequency and sometimes leads to impulse buying. Age, education, and income significantly influence adoption, with younger consumers showing higher usage.

3.2 Kokil, R., & Ushadevi, S. (2021). Consumer Behaviour towards Cashless Transactions in Puducherry. International Journal of Financial Research.

This study focuses on consumer behaviour towards cashless transactions in Puducherry. The findings reveal that consumers prefer digital payments for daily transactions due to time-saving benefits and ease of use. Cashback offers and rewards motivate users, while security concerns act as a barrier for some. The study concludes that government initiatives and awareness programs encourage adoption.

3.3 Goel, R. (2021). Consumer Perception towards Digital Transactions in a Cashless Economy. Journal of Economic Behaviour.

This research analyses consumer perception towards digital payments in a cashless economy. The study highlights that consumers value convenience, speed, and security while using digital payment apps. Incentives such as cashback and discounts increase usage. However, technical issues and lack of awareness affect adoption among older users.

3.4 **Bugheanu, A. M. (2020). Financial Spending Behaviour Based on Education, Gender, and Age. Journal of Consumer Studies.**

This research explores spending behaviour based on education, gender, and age. The study finds that educated consumers are more cautious and planned in spending, while younger users tend to spend impulsively. Digital payment apps affect spending habits differently across demographic groups.

IV. RESEARCH METHODOLOGY

RESEARCH

According to Redmen and Mary, research is defined as a systematic effort to gain knowledge.

METHODOLOGY

Methodology refers to the systematic way of solving a research problem and achieving the objectives of the study.

RESEARCH DESIGN

The research follows a descriptive research design, which helps in collecting detailed information about the usage pattern and spending behaviour of digital payment app users. The study mainly relies on primary data, supported by secondary data.

Primary Data

Primary data were collected directly from respondents through printed questionnaires distributed among users of digital payment applications in selected rural areas of Puducherry.

Secondary Data

Secondary data were collected from websites, journals, books, articles, and internet sources related to digital payments and consumer behaviour.

POPULATION OF THE STUDY

The population of the study consists of residents from Kalitheerthal Kuppam, Sanniyasi Kuppam, Sorapet, and Sellipattu villages in Puducherry who use or have access to digital payment apps such as Google Pay, PhonePe, Paytm, and BHIM.

SAMPLING DESIGN

The study uses a non-probability convenience sampling method. Respondents were selected based on their availability and willingness to participate.

- **Population Size:** More than 19,000
- **Sampling Method:** Convenience Sampling
- **Sample Size:** 401 respondents

STATISTICAL TOOLS USED

The collected data were analysed using appropriate statistical tools to obtain meaningful results. The tools used in the study include:

•Chi-Square

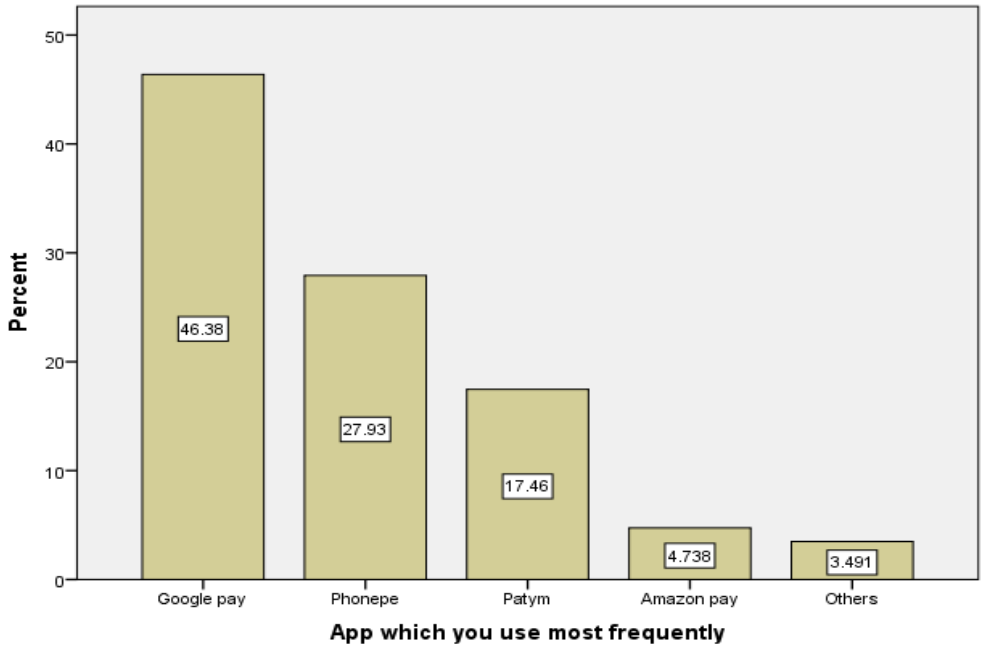
•Correlation

•ANOVA
• Regression Analysis

V.DATA ANALYSIS AND INTERPRETATION

5.1 Table showing digital payment app which most frequently used by the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Google pay	186	46.4	46.4	46.4
	Phonepe	112	27.9	27.9	74.3
	Paytm	70	17.5	17.5	91.8
	Amazon pay	19	4.7	4.7	96.5
	Others	14	3.5	3.5	100.0
	Total	401	100.0	100.0	



Inference:

The above chart shows that the majority of respondents use Google Pay 46.4%, while the minority use other apps 3.5%.

5.2Correlation between Spending amount increased and often unplanned purchases due to digital payment app

Hypotheses:

Null Hypotheses H_0: There is no significant Correlation Between opinion of Increased spending due to digital apps and opinion on unplanned purchases of the respondents due to digital app

Alternate Hypotheses H_1: There is significant Correlation Between opinion of Increased spending due to digital apps and opinion on unplanned purchases of the respondents due to digital app

Correlations

		Spending amount increased	often unplanned purchases
Spending amount increased	Pearson Correlation	1	.239**
	Sig. (2-tailed)		.000
	N	401	401
often unplanned purchases	Pearson Correlation	.239**	1
	Sig. (2-tailed)	.000	
	N	401	401

**. Correlation is significant at the 0.01 level (2-tailed).

Calculation:

R=0.239, p= 0.000

Inference:

The Significance (Sig.) value is 0.000, which is less than 0.05.
This indicates a positive and significant correlation between the respondents' opinion on increased spending due to digital apps and unplanned purchases.

5.3 Relationship between Weekly App Usage and Tracking Monthly Spending in digital payment app

Hypotheses
H_0 (Null Hypothesis): There Exist no significant association Between opinion on Weekly App usage and opinion on tracking monthly Spending Due to digital app of the Respondents
H_1 (Alternative Hypothesis): There Exist significant association Between opinion on Weekly App usage and opinion on tracking monthly Spending Due to digital app of the Respondents

How often do you use in week * Track my monthly spending Crosstabulation

Count

		Track my monthly spending					Total
		Regularly	Occasionally	Not to say	Rarely	Very Rarely	
How often do you use in week	Daily	47	24	12	9	2	94
	4-6Times	38	29	30	13	7	117
	2-3 times	17	53	49	21	7	147
	Rarely	7	11	10	8	7	43
Total		109	117	101	51	23	401

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	60.909[a]	12	.000
Likelihood Ratio	59.860	12	.000
Linear-by-Linear Association	33.145	1	.000
N of Valid Cases	401		

a. 1 cells (5.0%) have expected count less than 5. The minimum expected count is 2.47.

Calculation

$\chi^2 = 60.909$, Degrees of freedom (df)= 12 Significance , p-value= 0.00, table value 21.03

Inference

The calculated value (60.91) is greater than the table value (21.03), we reject the null hypothesis there Exist significant association Between opinion on Weekly App usage and opinion on tracking monthly Spending Due to digital app of the Respondents

5.4 Analysis Variance (ANOVA) between Age and Spending Amount Increased in digital payment app

Hypotheses

H_0 (Null Hypothesis): There is no significant difference Between Age of the Respondents and opinion on amount spend of the Respondents

H_1 (Alternative Hypothesis): There is significant difference Between Age of the Respondents and opinion on amount spend of the Respondents

ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6.074	4	1.519	2.161	.073
Within Groups	278.240	396	.703		
Total	284.314	400			

Calculation

calculated F = 2.161

Table F (df = 4, 395, α = 0.05) ≈ 2.37

Since 2.161< 2.37 (Sig = 0.073 > 0.05) → Not Significant

Inference:

The ANOVA result shows a significance value of 0.073, which is greater than 0.05. Hence, there is no significant difference between the age of the respondents and their opinion on the amount spent**.**

Regression Analysis

5.5Impact on purpose of the using app on increase spending amount of the respondents due to digital app

Hypotheses

Null Hypothesis (H_0): Ther exist no significant impact on purpose of the using app on increase spending amount of the respondents due to digital app

Alternative Hypothesis (H_1): Ther exist significant impact on purpose of the using app on increase spending amount of the respondents due to digital app

Impact on purpose of the using app on increase spending amount of the respondents due to digital app

ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.918	1	7.918	5.051	.025[b]
	Residual	623.880	398	1.568		
	Total	631.797	399			

a. Dependent Variable: Purpose of using

b. Predictors: (Constant), Spending amount increased

Coefficientsa

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.212	.152		14.566	.000
	Spending amount increased	.125	.055	.112	2.247	.025

a. Dependent Variable: Purpose of using

Calculation

- R = 0.112: Very weak positive relationship.
- R^2 = 0.012: Only 1.2% variation is explained.
- F = 5.001, p = 0.026 (<0.05): Model is significant.
- B = 0.124: For every 1 unit increase in spending, purpose of using increases by 0.124.
- t = 2.236, p = 0.026 (<0.05): Spending increase has a weak but significant positive effect**.**

Inference

There exists a significant impact between the purpose of using digital apps and the increase in spending amount of the respondents (F = 5.051, Sig. = 0.025), and the positive R value (0.112) indicates a weak positive impact — meaning that as the purpose of app usage increases, spending also slightly increases.

FINDINGS

1. Digital payment apps are mostly used by young and working-age people, especially those between 26–35 years, showing higher acceptance among active earners.
2. Middle-income groups are the major users of digital apps, mainly for small and medium-value daily expenses.
3. Google Pay is the most preferred app due to its ease of use, trust, and wide acceptance.
4. Many users feel that their spending has increased after using digital payment apps, mainly because of convenience and quick transactions.
5. Frequent use of digital apps is strongly linked with unplanned purchases, while regular expense tracking remains only moderate.

SUGGESTIONS

1. Digital payment apps should include spending alerts and confirmation reminders to reduce unplanned purchases.
2. Simple budget tools and spending limits should be provided, especially for middle-income users.
3. Weekly and monthly expense summaries should be shown clearly to improve spending awareness.
4. Awareness and training programs should be conducted for older people and low-usage groups to increase digital adoption.
5. Category-wise spending warnings should be introduced to help users control expenses in areas like shopping and food.

CONCLUSION

The study concludes that digital payment apps have become widely used, especially among young and middle-income users, due to their convenience and ease of use. While these apps support quick and cashless transactions, they also encourage higher spending and unplanned purchases. Many users have only moderate control over their expenses and do not regularly track their spending. The findings show a clear need for better budgeting tools, spending alerts, and awareness features within digital payment apps. With proper guidance and responsible usage, digital payment apps can help users manage their finances effectively while enjoying the benefits of a digital economy.

BOOKS REFERRED

1. Niosi, A. (2021), *Introduction to Consumer Behaviour*, 2nd Edition, Pages 213–220.
2. Talukdar, R. (2025), *The Digital Payments Ecosystem of India: Planning Security Today for a Resilient Tomorrow*, 1st Edition, Pages 19–22.
3. Kothari, C. R. (2019), *Research Methodology: Methods and Techniques*, 3rd Edition, Pages 31, 55, 95, 152.

ARTICLES REFERRED

1. Dev, H., Gupta, R., Dharmavira, S., & Kumar, D. (2024), *From Cash to Cashless: UPI's Impact on Spending Behaviour Among Indian Users and Prototyping Financially Responsible Interfaces*, ACM Conference Proceedings, Vol. 4, Issue 3, Pages 5–7.
2. Sinkar, S. V. (2025), *The Effectiveness of Digital Wallets in Promoting Financial Inclusion*, Economic Sciences (ES), Vol. 6, Issue 1, Pages 2–5.

3. Jiang, Y. (2022), *The Influence of Payment Method: Do Consumers Pay More with Mobile Payment?*, Claremont Graduate University, Vol. 4, Issue 2, Pages 5–8.
4. Goel, R., Sahai, S., Vinaik, A., & Garg, V. (2019), *Moving from Cash to Cashless Economy: A Study of Consumer Perception Towards Digital Transactions*, International Journal of Recent Technology and Engineering (IJRTE), Vol. 5, Issue 3, Pages 9–20.
5. Varshney, D., & Chawla, G. (2025), *The Impact of Digital Payments on Consumer Spending Pattern*, International Journal of Research Publication and Reviews (IJRPR), Vol. 3, Issue 5, Pages 9–12.