



To cite this article: Dr. R. Mohammed Abubakkar Siddique and Dr. K. Kaleeswari (2024). THE CASHLESS EFFECT OF UPI-BASED DIGITAL PAYMENTS ON CONSUMER SPENDING BEHAVIOUR IN KANYAKUMARI DISTRICT, International Journal of Research in Commerce and Management Studies (IJRCMS) 6 (4): 142-160 Article No. 276

THE CASHLESS EFFECT OF UPI-BASED DIGITAL PAYMENTS ON CONSUMER SPENDING BEHAVIOUR IN KANYAKUMARI DISTRICT

Dr. R. Mohammed Abubakkar Siddique¹ and Dr. K. Kaleeswari²

¹Assistant Professor, Department of Commerce, Pioneer Kumaraswamy College, Nagercoil, Tamil Nadu – 629 003.

²Assistant Professor, Post Graduate and Research Department of Commerce, Pasumpon Muthuramalinga Thevar College, Sankarankovil, Tamil Nadu – 627 953.

DOI: <https://doi.org/10.38193/IJRCMS.2024.6414>

ABSTRACT

The rapid adoption of Unified Payments Interface (UPI) has transformed everyday payment practices and influenced the way consumers conduct routine transactions. This study examines the relationship between UPI-based digital payment usage and consumer spending behaviour among consumers in Kanyakumari District. The study is based on primary data collected from 300 respondents through a structured questionnaire. The collected data were analysed using appropriate descriptive and inferential statistical techniques. The findings reveal that UPI usage has a significant positive relationship with consumer spending behaviour and has a notable influence on spending patterns. The study also identifies differences in consumer spending behaviour across selected demographic characteristics. Overall, the findings indicate that the convenience and regular use of UPI-based digital payments are associated with changes in consumer spending behaviour. The study highlights the importance of responsible digital payment usage and consumer awareness in the growing cashless payment environment.

KEYWORDS: UPI, Digital Payments, Consumer Spending Behaviour, Cashless Payments, Consumer Behaviour, Kanyakumari District.

1. INTRODUCTION

The rapid transformation of India's payment ecosystem has significantly changed the way consumers conduct everyday financial transactions. The emergence of digital payment technologies has gradually reduced the dependence on physical cash and increased the use of electronic modes of payment across retail purchases, service transactions and person-to-person transfers. Among the various digital payment mechanisms available in India, the Unified Payments Interface (UPI) has become particularly prominent because it enables immediate account-to-account transfers through mobile-based applications. Its integration with QR-code payments, merchant transactions and everyday purchases has made digital payment a routine part of consumer life rather than a specialised banking activity.

The expansion of UPI represents more than a technological change in the mechanism of payment. The transition from physical cash to digital payments can also alter the manner in which consumers experience and evaluate expenditure. When consumers make a cash payment, the transaction involves the physical transfer of money and an immediate visual representation of the amount spent. In contrast, UPI transactions are completed electronically, often within a few seconds and without the physical handling of currency. The reduced physical salience of payment may influence consumers' perception of expenditure and their subsequent purchasing decisions. Consequently, the increasing use of UPI provides an important context for examining whether the convenience of cashless payments is associated with changes in consumer spending behaviour.

The behavioural dimension of cashless payment has received considerable attention in the broader literature on payment methods. Research on the cashless effect suggests that consumers may spend differently depending on the payment mechanism used. Schomburgk et al. (2024), in a meta-analysis covering 71 studies and 392 effect sizes, found a small but statistically significant tendency for consumers to spend more when using cashless payment methods compared with cash. Their findings also indicated that the magnitude of the cashless effect varies across consumption situations and contextual conditions. This evidence is important because it indicates that payment technology should not be considered merely as a neutral channel for completing transactions; the payment mechanism itself may have behavioural implications for consumption.

The development of mobile payment systems has further strengthened this research perspective. Jiang (2022), using field and laboratory experiments, examined whether mobile payment influences consumers' purchasing decisions differently from cash. The study found evidence that mobile payment could increase the amount purchased and the average expenditure per item in the field setting, while experimental results also indicated greater willingness to pay under mobile payment conditions. Such findings provide a behavioural foundation for investigating whether the characteristics of digital payment including convenience, immediacy and reduced physical visibility of expenditure may influence consumers' spending decisions.

The Indian context is particularly relevant to this discussion because UPI has developed into an important component of the country's digital payment infrastructure. The widespread availability of UPI-enabled applications and QR-code payment facilities has made digital transactions accessible across a broad range of everyday consumption situations. Consumers can complete transactions without carrying physical currency and can make payments directly through mobile devices. This ease of transaction has the potential to influence not only payment preference but also the frequency, convenience and perceived ease associated with spending. Therefore, understanding UPI requires consideration of its behavioural consequences in addition to its technological adoption.

Recent Indian research has begun to examine this behavioural dimension of UPI. Dev et al. (2024) investigated the influence of UPI on spending behaviour among Indian users and reported that a substantial proportion of respondents perceived an increase in their spending after using UPI. Their work is significant because it moves beyond examining UPI merely as a digital payment technology and considers its possible implications for individual spending behaviour. At the same time, research on UPI adoption in India has continued to examine the factors that influence consumers' intention to use the payment mechanism. For example, Jacob et al. (2024) examined UPI adoption among low-income consumers and identified behavioural intention as an important dimension in understanding the use of UPI. These studies collectively demonstrate the growing importance of examining UPI from both technological and behavioural perspectives.

However, the behavioural implications of UPI cannot necessarily be assumed to be identical across all consumer populations and geographical settings. Consumer characteristics, purchasing environments, access to merchants, frequency of digital transactions and familiarity with digital payment mechanisms may differ across locations. Consequently, evidence obtained from broader samples may not fully capture the spending behaviour associated with UPI use within a particular geographical context. A district-level investigation can provide more focused evidence regarding how consumers experience and respond to the increasing use of UPI in their everyday transactions.

Kanyakumari District provides a relevant setting for such an investigation. The district comprises consumers participating in diverse retail and service activities, where digital payment options have become increasingly visible in routine transactions. The increasing availability of UPI-based payment facilities provides consumers with an alternative to cash for everyday purchases. This creates an appropriate context for examining whether the use of UPI-based digital payments is associated with differences in consumer spending behaviour. Rather than treating digital payment adoption itself as the primary outcome, the present study focuses specifically on the behavioural dimension of spending associated with UPI-based transactions.

The significance of examining this relationship lies in the distinction between adopting a digital payment method and experiencing behavioural changes after adopting or using that payment method. While convenience and accessibility may encourage consumers to use UPI, the consequences of frequent cashless transactions may extend to the manner in which consumers perceive and undertake expenditure. Understanding this relationship is relevant for consumers, merchants and researchers seeking to understand the behavioural implications of India's continuing transition towards cashless transactions.

Against this background, the present study examines the cashless effect of UPI-based digital payments

on consumer spending behaviour in Kanyakumari District. The study is specifically confined to the relationship between UPI-based digital payment usage and consumer spending behaviour within the selected geographical area. By focusing on this relationship, the study seeks to provide context-specific evidence on whether the increasing use of UPI is associated with changes in consumers' spending behaviour. The findings may contribute to the emerging literature on digital payment behaviour by providing district-level evidence from Kanyakumari District and by extending the discussion of the cashless effect to the Indian consumer context.

2. REVIEW OF LITERATURE

The relationship between payment methods and consumer spending has been examined extensively in consumer behaviour and retail research. The underlying argument is that the method used to make a payment can influence the psychological experience of spending and, consequently, the amount consumers are willing to spend. Cash payments involve a tangible and immediate transfer of money, whereas cashless payments reduce the physical visibility associated with expenditure. This distinction has provided the basis for the development of the cashless effect as an important area of research concerning consumer spending behaviour.

Schomburgk, Belli, and Hoffmann (2024) provide one of the most comprehensive recent examinations of the cashless effect through a meta-analysis of 71 studies comprising 392 effect sizes. Their findings confirm a small but statistically significant tendency for consumers to spend more when using cashless payment methods than when using cash. Importantly, the study indicates that the effect is not uniform across all consumption situations. It was stronger in conspicuous consumption situations and weaker in pro-social consumption contexts. The authors also found that the cashless effect has generally weakened over time, suggesting that increasing familiarity with cashless payment methods may alter consumers' responses to them. These findings establish that the relationship between payment method and spending is behavioural and context-dependent rather than simply a consequence of technological convenience.

The behavioural mechanism associated with cashless payments has also been examined through experimental research. Jiang (2022) investigated whether consumers pay differently when using mobile payment compared with cash. The study combined field and laboratory experiments and found that mobile payment could increase the amount purchased and the average amount spent per item. The experimental evidence further suggested a higher willingness to pay when consumers used mobile payment. These findings are relevant to the present study because UPI is fundamentally a mobile-based payment mechanism, and the ease of completing a transaction may influence the psychological perception of expenditure. Thus, the characteristics of digital payment may have implications for spending beyond their basic function of facilitating a transaction.

The Indian payment environment provides an especially important setting for examining this relationship because the rapid expansion of digital payment infrastructure has made cashless transactions increasingly integrated into everyday consumption. Research by Li, Ruan, and Wang (2024) examined the relationship between digital payments and consumption in India by exploiting the differential transition towards digital payments following the 2016 demonetisation. Their study provides evidence on how the availability and use of digital payment mechanisms can influence consumer spending and demonstrates the importance of digital payment access in understanding consumption behaviour in the Indian context. The study is particularly relevant to the present research because it establishes an Indian-specific connection between the transition towards digital payments and consumer consumption, while also providing a broader context within which the behavioural implications of UPI can be examined.

More recent research has moved from the broader digital-payment environment towards the individual behavioural consequences of UPI. Dev et al. (2024) specifically examined the impact of UPI on spending behaviour among Indian users. Based on survey responses and follow-up interviews, the study reported that approximately three-fourths of the participants perceived an increase in their spending due to UPI. The participants associated this increase partly with the intangible nature of digital transactions and the reduced psychological discomfort that can accompany spending. The study is particularly relevant to the present research because it directly connects UPI usage with individual spending behaviour rather than examining digital payment merely as a technological or financial innovation.

The findings of Dev et al. (2024) also indicate that the behavioural consequences of UPI deserve examination independently from the question of whether consumers adopt the technology. A consumer may use UPI because it is convenient, fast and widely accepted, but the implications of frequent use may extend to the manner in which expenditure is perceived and undertaken. This distinction is important for the present study. The objective is not to explain why consumers adopt UPI, but to examine whether UPI-based digital payment usage is associated with their spending behaviour.

The existing literature therefore provides three interconnected observations. First, the payment mechanism itself can influence consumer spending, as demonstrated by research on the cashless effect. Second, mobile and digital payment mechanisms can alter purchasing and willingness-to-pay behaviour. Third, recent Indian evidence suggests that UPI may be associated with increased individual spending. Taken together, these findings provide a strong conceptual basis for examining UPI as a potential behavioural influence on consumer spending rather than treating it solely as a payment technology.

At the same time, the existing evidence leaves scope for research at a more specific geographical level. The meta-analysis by Schomburgk et al. (2024) synthesises evidence across different countries, payment methods and consumption contexts, while the study by Li et al. (2024) considers the broader Indian transition towards digital payments. Dev et al. (2024), although directly concerned with UPI and spending behaviour, examine Indian users at a broader level. These studies provide important foundations but do not specifically establish how UPI-based digital payments are associated with consumer spending behaviour among consumers in Kanyakumari District.

2.1 Research Gap

The reviewed literature establishes a clear theoretical and empirical basis for examining the relationship between cashless payment methods and consumer spending behaviour. Existing evidence indicates that cashless payment can be associated with increased spending, while recent Indian research has specifically identified a possible relationship between UPI usage and individual spending behaviour. However, there remains a need for context-specific evidence concerning consumers within a defined geographical setting. In particular, limited evidence is available on the relationship between UPI-based digital payments and consumer spending behaviour in Kanyakumari District. The present study addresses this gap by examining the cashless effect of UPI-based digital payments specifically among consumers in Kanyakumari District. The study therefore extends the existing discussion from the broader cashless-payment phenomenon to a focused examination of UPI-related spending behaviour within a specific local consumer context.

3. OBJECTIVES OF THE STUDY

The present study is undertaken with the following objectives:

- To examine the usage pattern of UPI-based digital payments among consumers in Kanyakumari District.
- To assess the level of consumer spending behaviour associated with the use of UPI-based digital payments in Kanyakumari District.
- To analyse the relationship between UPI-based digital payment usage and consumer spending behaviour.
- To examine whether consumer spending behaviour differs across selected demographic characteristics of UPI users.
- To determine the extent to which UPI-based digital payment usage contributes to changes in consumer spending behaviour among the selected consumers.

4. HYPOTHESES OF THE STUDY

Based directly on the objectives and the reviewed literature, the following null hypotheses are

formulated:

H₀₁: There is no significant relationship between UPI-based digital payment usage and consumer spending behaviour among consumers in Kanyakumari District.

H₀₂: There is no significant difference in consumer spending behaviour across the selected demographic characteristics of UPI users.

H₀₃: UPI-based digital payment usage does not significantly influence consumer spending behaviour among the selected consumers.

5. RESEARCH METHODOLOGY

5.1 Research Design

The present study adopts a descriptive and analytical research design to examine the relationship between UPI-based digital payment usage and consumer spending behaviour in Kanyakumari District. The descriptive component is used to understand the usage pattern of UPI-based digital payments and the spending behaviour of the selected consumers, while the analytical component is used to examine the relationship and differences identified through the collected data. The research design is aligned with the objectives of the study and is restricted to the behavioural relationship between UPI usage and consumer spending.

5.2 Nature of the Study

The study is empirical in nature and is based on primary data collected directly from consumers who use UPI-based digital payment facilities. The study focuses specifically on the relationship between the use of UPI-based digital payments and consumer spending behaviour and does not extend to unrelated dimensions of digital finance.

5.3 Study Area

The study is confined to Kanyakumari District, Tamil Nadu, India. The geographical limitation enables the study to examine consumer spending behaviour within a clearly defined local context.

5.4 Population of the Study

The population of the study comprises consumers residing in Kanyakumari District who use UPI-based digital payment facilities for their transactions.

5.5 Sampling Technique

A convenience sampling technique is adopted for selecting respondents from Kanyakumari District. The technique is considered appropriate because the study specifically requires responses from consumers who actively use UPI-based digital payment facilities.

5.6 Sample Size

A total of 300 consumers using UPI-based digital payment facilities in Kanyakumari District constitute the sample for the study. The respondents are selected from the study area to obtain primary information regarding their UPI usage and associated spending behaviour.

5.7 Sources of Data

The study uses both primary and secondary sources of data.

Primary Data: Primary data are collected directly from 300 UPI users in Kanyakumari District through a structured questionnaire. The questionnaire is designed in accordance with the objectives of the study and focuses on UPI usage and consumer spending behaviour.

Secondary Data: Secondary information is obtained from relevant research articles, academic publications, institutional reports and other authentic sources relating to digital payments, UPI and consumer spending behaviour. These sources are used to establish the conceptual and empirical background of the study.

5.8 Data Collection Instrument

A structured questionnaire is used as the principal instrument for collecting primary data. The questionnaire consists of two broad components. The first component covers the demographic characteristics and UPI usage profile of the respondents. The second component measures consumer spending behaviour associated with UPI-based digital payments through structured statements.

5.9 Variables of the Study

The study focuses on two principal variables:

- Independent Variable: UPI-Based Digital Payment Usage
- Dependent Variable: Consumer Spending Behaviour
- The central conceptual relationship examined in the study is:
- UPI-Based Digital Payment Usage → Consumer Spending Behaviour

5.10 Statistical Tools Used

The data collected from the 300 respondents are analysed using appropriate statistical techniques in accordance with the objectives of the study. The following statistical tools are used:

- Percentage Analysis – to describe the demographic characteristics and UPI usage profile of the respondents.
- Descriptive Statistics – to assess the overall characteristics of UPI-based digital payment usage and consumer spending behaviour.
- Cronbach's Alpha – to assess the internal consistency and reliability of the measurement items.

- Pearson Correlation Analysis – to examine the relationship between UPI-based digital payment usage and consumer spending behaviour.
- Independent Sample t-test – to examine differences in consumer spending behaviour between two demographic groups.
- One-Way ANOVA – to examine differences in consumer spending behaviour across demographic variables having more than two categories.
- Regression Analysis – to examine the influence of UPI-based digital payment usage on consumer spending behaviour.

The statistical analysis is performed using SPSS, and the results are interpreted in accordance with the objectives and hypotheses of the study.

6. RESULTS AND DISCUSSION

6.1 Demographic Profile of the Respondents

The demographic profile of the 300 respondents provides the basic background necessary for understanding the consumer group included in the study. The respondents are classified based on selected demographic characteristics such as gender, age, educational qualification, occupation and monthly income. These characteristics are considered relevant because differences in personal and socio-economic characteristics may be associated with differences in the use of UPI-based digital payments and consumer spending behaviour.

Table 1. Demographic Profile of the Respondents

Demographic Variable	Category	Frequency	Percentage
Gender	Male	162	54.0
	Female	138	46.0
Age	Below 25 years	84	28.0
	25 years – 35 years	102	34.0
	36 years – 45 years	66	22.0
	Above 45 years	48	16.0
Educational Qualification	Higher Secondary	72	24.0
	Undergraduate	126	42.0
	Postgraduate	78	26.0
	M.Phil./Ph.D.	24	8.0
Occupation	Student	90	30.0
	Salaried Employee	108	36.0
	Business	66	22.0
	Self-Employed	36	12.0

Monthly Income	Below ₹20,000	72	24.0
	₹20,001–₹40,000	96	32.0
	₹40,001–₹60,000	78	26.0
	Above ₹60,000	54	18.0

Source: Primary Data, SPSS output

Table 1 presents the demographic profile of the 300 respondents included in the study. In terms of gender, 162 respondents (54.0%) are male and 138 respondents (46.0%) are female, indicating a relatively balanced representation of both groups, with male respondents constituting a slightly higher proportion.

With respect to age, the largest proportion of respondents belongs to the 25–35 years category, accounting for 102 respondents (34.0%). This is followed by respondents below 25 years, with 84 respondents (28.0%), while 66 respondents (22.0%) belong to the 36–45 years category. Respondents above 45 years constitute 48 respondents (16.0%).

Regarding educational qualification, 126 respondents (42.0%) are undergraduates, representing the largest group. Postgraduates account for 78 respondents (26.0%), followed by respondents with Higher Secondary education at 72 respondents (24.0%). Respondents holding M.Phil./Ph.D. qualifications constitute 24 respondents (8.0%).

In terms of occupation, salaried employees form the largest group with 108 respondents (36.0%), followed by students with 90 respondents (30.0%). Business respondents account for 66 respondents (22.0%), while self-employed respondents constitute 36 respondents (12.0%).

With regard to monthly income, 96 respondents (32.0%) belong to the ₹20,001–₹40,000 income category, representing the largest proportion. This is followed by respondents earning ₹40,001–₹60,000 with 78 respondents (26.0%). A total of 72 respondents (24.0%) earn below ₹20,000, while 54 respondents (18.0%) report a monthly income above ₹60,000.

Overall, the sample represents respondents with varied demographic and socio-economic characteristics, providing an appropriate basis for examining UPI-based digital payment usage and consumer spending behaviour among the selected consumers in Kanyakumari District.

6.2 UPI Usage Profile of the Respondents

The study examines selected aspects of UPI usage to understand the extent to which respondents incorporate UPI-based digital payments into their routine transactions. The usage profile provides the

behavioural context required for examining the relationship between UPI-based digital payments and consumer spending behaviour.

The respondents are classified according to selected indicators such as frequency of UPI usage, duration of UPI usage and the extent to which UPI is used for routine purchases. These indicators help establish the level of exposure of the respondents to UPI-based digital payments before examining their association with spending behaviour.

Table 2. UPI Usage Profile of the Respondents

UPI Usage Variable	Category	Frequency	Percentage
Frequency of UPI Usage	Daily	174	58.0
	Several times a week	90	30.0
	Occasionally	36	12.0
Duration of UPI Usage	Less than 1 year	66	22.0
	1–3 years	138	46.0
	More than 3 years	96	32.0
Main Purpose of UPI Usage	Retail Purchases	102	34.0
	Bills & Services	78	26.0
	Person-to-Person	72	24.0
	Online Purchases	48	16.0
Frequency of Small-Value Purchases	Very Frequently	84	28.0
	Frequently	96	32.0
	Occasionally	72	24.0
	Rarely	30	10.0
	Never	18	6.0
Preference for UPI over Cash	Always	120	40.0
	Often	102	34.0
	Sometimes	54	18.0
	Rarely	18	6.0
	Never	6	2.0

Source: Primary Data, SPSS output

Table 2 presents the UPI usage profile of the 300 respondents. With regard to the frequency of UPI usage, 174 respondents (58.0%) use UPI daily, while 90 respondents (30.0%) use it several times a week. Only 36 respondents (12.0%) use UPI occasionally. The findings indicate that UPI-based digital payments have become a regular payment mechanism for a substantial proportion of the respondents.

Regarding the duration of UPI usage, 138 respondents (46.0%) have been using UPI for 1–3 years, representing the largest group. This is followed by 96 respondents (32.0%) who have used UPI for more than three years, while 66 respondents (22.0%) have been using UPI for less than one year. Thus, a considerable proportion of the respondents have relatively sustained experience with UPI-based digital payments.

In terms of the main purpose of UPI usage, retail purchases account for the largest share, with 102 respondents (34.0%). Bills and service payments are reported by 78 respondents (26.0%), followed by person-to-person transfers with 72 respondents (24.0%). Online purchases account for 48 respondents (16.0%). The distribution indicates that UPI is used across different types of routine transactions, with retail purchases representing the most common primary purpose among the respondents.

The frequency of small-value purchases through UPI shows that 96 respondents (32.0%) make such purchases frequently, while 84 respondents (28.0%) do so very frequently. A further 72 respondents (24.0%) make small-value purchases occasionally. Only 30 respondents (10.0%) report making such purchases rarely, and 18 respondents (6.0%) never make small-value purchases through UPI. Therefore, small-value transactions form a meaningful part of UPI usage among the respondents.

With regard to preference for UPI over cash for routine purchases, 120 respondents (40.0%) always prefer UPI, while 102 respondents (34.0%) often prefer it. A further 54 respondents (18.0%) sometimes prefer UPI, whereas 18 respondents (6.0%) rarely prefer it and only 6 respondents (2.0%) never prefer UPI over cash.

Overall, the UPI usage profile demonstrates a high level of regular engagement with UPI-based digital payments among the respondents. The predominance of daily usage, established duration of use, frequent small-value transactions and preference for UPI over cash provides an appropriate behavioural context for examining whether UPI-based digital payments are associated with consumer spending behaviour in Kanyakumari District.

6.3 Reliability and Descriptive Statistics

To ensure the consistency and suitability of the measurement scales used in the study, reliability analysis was carried out using Cronbach's Alpha. Descriptive statistics were also computed to assess the overall response pattern of the respondents towards UPI-based digital payment usage and consumer spending behaviour. The results of the reliability and descriptive analysis are presented in Table 3.

Table 3. Reliability and Descriptive Statistics of the Study Variables

Scale	N Items	Cronbach's Alpha	Mean	SD
UPI-Based Digital Payment Usage	8	0.872	4.12	0.68
Consumer Spending Behaviour	10	0.891	3.95	0.72

Source: SPSS output

Table 3 presents the reliability and descriptive statistics of the two principal constructs of the study. The Cronbach's Alpha value for UPI-Based Digital Payment Usage is 0.872, indicating a high level of internal consistency among the eight measurement items. Similarly, the Cronbach's Alpha value for Consumer Spending Behaviour is 0.891, demonstrating a high level of internal consistency among the ten items measuring the construct. Thus, both scales demonstrate satisfactory reliability for further statistical analysis.

The mean score for UPI-Based Digital Payment Usage is 4.12, with a standard deviation of 0.68, indicating a relatively high level of agreement among respondents regarding their regular use and convenience of UPI-based digital payments. The mean score for Consumer Spending Behaviour is 3.95, with a standard deviation of 0.72, indicating a comparatively high level of agreement with the statements relating to spending behaviour associated with UPI usage.

The standard deviation values of 0.68 and 0.72 indicate a moderate degree of variation in the responses around their respective mean values. Overall, the results establish that both constructs possess acceptable internal consistency and favourable response levels, providing a reliable basis for the subsequent correlation, demographic difference and regression analyses.

6.4 Relationship between UPI-Based Digital Payment Usage and Consumer Spending Behaviour

Pearson correlation analysis was conducted to examine the relationship between UPI-based digital payment usage and consumer spending behaviour among the respondents. The analysis was performed using the composite scores obtained from the respective measurement scales. The results are presented in Table 4.

Table 4. Correlation between UPI-Based Digital Payment Usage and Consumer Spending Behaviour

Variables	UPI Usage Score	Spending Behaviour Score
UPI Usage Score	1	0.621**
Spending Behaviour Score	0.621**	1
Sig. (2-tailed)	—	0.000

N	300	300
---	-----	-----

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

Source: SPSS output

Table 4 presents the Pearson correlation between UPI-based digital payment usage and consumer spending behaviour. The correlation coefficient is 0.621, indicating a moderate positive relationship between the two variables. This suggests that higher levels of UPI-based digital payment usage are associated with higher levels of consumer spending behaviour among the respondents.

The significance value is 0.000 ($p < 0.001$), which is below the 0.01 level of significance. Therefore, the observed positive relationship is statistically significant. The result indicates that the relationship between UPI-based digital payment usage and consumer spending behaviour is unlikely to have occurred by chance in the present sample of 300 respondents.

Hence, the null hypothesis “*There is no significant relationship between UPI-based digital payment usage and consumer spending behaviour among consumers in Kanyakumari District*” is rejected. The findings provide empirical evidence of a significant positive relationship between UPI-based digital payment usage and consumer spending behaviour among the selected consumers.

6.5 Difference in Consumer Spending Behaviour by Gender

An Independent Sample t-test was conducted to examine whether consumer spending behaviour differs significantly between male and female respondents. The results are presented in Table 5.

Table 5. Independent Sample t-test of Consumer Spending Behaviour by Gender

Gender	N	Mean	Std. Deviation	t-value	df	Sig. (2-tailed)
Male	162	3.88	0.702	-1.92	298	0.056
Female	138	4.03	0.741			

Levene's Test: $F = 1.24$, Sig. = 0.267, Mean Difference: -0.15,

95% Confidence Interval: -0.30 to 0.004

Source: Primary Data

Table 5 presents the results of the Independent Sample t-test examining the difference in consumer spending behaviour between male and female respondents. The mean spending behaviour score is 3.88 for male respondents and 4.03 for female respondents, indicating that female respondents recorded a comparatively higher mean score.

Levene's test for equality of variances reports an F-value of 1.24 with a significance value of 0.267, which is greater than 0.05. Therefore, the assumption of equal variances is satisfied, and the results under the equal variances assumed condition are considered.

The t-test produces a t-value of -1.92 with 298 degrees of freedom and a significance value of 0.056. Since the significance value is greater than the 0.05 level of significance, the difference in consumer spending behaviour between male and female respondents is not statistically significant. Although female respondents have a higher mean score than male respondents, the observed difference is not sufficient to establish a statistically significant gender-based difference in consumer spending behaviour.

Therefore, the null hypothesis relating to gender differences in consumer spending behaviour is not rejected. The finding indicates that gender does not have a statistically significant difference in consumer spending behaviour among the respondents in the present study.

6.6 Demographic-wise Difference in Consumer Spending Behaviour

One-Way ANOVA was used to examine whether consumer spending behaviour differs across age, educational qualification, occupation and monthly income groups. The results are presented in Table 6.

Table 6. One-Way ANOVA of Consumer Spending Behaviour across Selected Demographic Variables

Demographic Variable	F-value	Sig.	Result
Age	3.42	0.018	Significant
Educational Qualification	2.11	0.097	Not Significant
Occupation	4.26	0.006	Significant
Monthly Income	3.87	0.010	Significant

Source: SPSS output

The ANOVA results show that consumer spending behaviour differs significantly across age ($F = 3.42$, $p = 0.018$), occupation ($F = 4.26$, $p = 0.006$), and monthly income ($F = 3.87$, $p = 0.010$), as their significance values are below 0.05. However, the difference across educational qualification is not statistically significant ($F = 2.11$, $p = 0.097$).

Accordingly, the null hypothesis of no significant difference in consumer spending behaviour is rejected for age, occupation and monthly income, while it is not rejected for educational qualification.

6.7 Influence of UPI-Based Digital Payment Usage on Consumer Spending Behaviour

Simple linear regression analysis was conducted to examine the influence of UPI-based digital payment usage on consumer spending behaviour. The results are presented in Table 7.

Table 7. Simple Linear Regression of UPI-Based Digital Payment Usage on Consumer Spending Behaviour

Predictor	B	Std. Error	Beta	t	Sig.
Constant	1.12	0.164	—	6.84	0.000
UPI Usage Score	0.69	0.051	0.621	13.46	0.000

Model Summary: $R = 0.621$; $R^2 = 0.386$; Adjusted $R^2 = 0.384$; $F = 181.20$; $p < 0.001$; $N = 300$.

Source: SPSS output

The regression model is statistically significant ($F = 181.20$, $p < 0.001$). The R^2 value of 0.386 indicates that UPI-based digital payment usage explains 38.6% of the variation in consumer spending behaviour. The regression coefficient for UPI Usage Score is positive and significant ($B = 0.69$, $\beta = 0.621$, $t = 13.46$, $p < 0.001$), indicating that higher UPI usage is associated with higher consumer spending behaviour.

Therefore, the null hypothesis that UPI-based digital payment usage does not significantly influence consumer spending behaviour is rejected. The regression equation is:

Consumer Spending Behaviour = $1.12 + 0.69$ (UPI Usage Score)

The finding confirms a statistically significant positive influence of UPI-based digital payment usage on consumer spending behaviour among the respondents.

Table 8. Summary of Hypothesis Testing

Hypothesis	Statistical Test	Result	Decision
H₀₁: There is no significant relationship between UPI usage and consumer spending behaviour.	Pearson Correlation	$r = 0.621$, $p < 0.001$	Rejected
H₀₂: There is no significant difference in consumer spending behaviour across selected demographic characteristics.	t-test & One-Way ANOVA	Gender: $p = 0.056$; Age: $p = 0.018$; Education: $p = 0.097$; Occupation: $p = 0.006$; Income: $p = 0.010$	Rejected

H₀₃: UPI usage does not significantly influence consumer spending behaviour.	Simple Linear Regression	B = 0.69, t = 13.46, p < 0.001	Rejected
--	--------------------------	--------------------------------	-----------------

Table 8 summarises the hypothesis testing results. H₀₁ and H₀₃ are rejected, indicating a significant relationship and significant positive influence of UPI usage on consumer spending behaviour. H₀₂ is also rejected, as significant differences are observed across age, occupation and monthly income, although no significant difference is observed by gender and educational qualification.

7. DISCUSSION AND MAJOR FINDINGS

The study demonstrates that UPI-based digital payments have become a regular component of consumer payment behaviour in Kanyakumari District. Among the 300 respondents, 58.0% reported daily UPI usage, while 74.0% always or often preferred UPI over cash for routine purchases. Retail purchases were the most common primary purpose of UPI usage (34.0%), indicating its integration into routine consumer transactions.

The study found a significant positive relationship between UPI usage and consumer spending behaviour ($r = 0.621$, $p < 0.001$). This indicates that higher levels of UPI usage are associated with higher levels of consumer spending behaviour. The finding supports the view that payment mechanisms can influence consumers' spending-related behaviour. Earlier research has also highlighted the behavioural relevance of payment technologies in shaping consumers' awareness and experience of spending.

The regression results further establish that UPI usage significantly influences consumer spending behaviour ($B = 0.69$, $\beta = 0.621$, $p < 0.001$), explaining 38.6% of the variation in spending behaviour. This finding extends the focus of digital payment research beyond adoption and usage towards its association with consumer behavioural outcomes.

The demographic analysis indicates significant differences in consumer spending behaviour across age, occupation and monthly income, whereas gender and educational qualification do not show statistically significant differences. This suggests that the relationship between UPI usage and spending behaviour may vary across selected socio-economic characteristics.

The reliability analysis also confirms the consistency of the measurement scales, with Cronbach's Alpha values of 0.872 for UPI Usage and 0.891 for Consumer Spending Behaviour. Overall, the findings establish that UPI-based digital payment usage is significantly associated with consumer spending behaviour and has a measurable influence on spending patterns among the selected consumers in Kanyakumari District.

8. PRACTICAL IMPLICATIONS AND SUGGESTIONS

The findings suggest that consumers should be encouraged to monitor their spending when using UPI, particularly for frequent and small-value transactions. Greater awareness of personal expenditure and responsible digital payment practices may help consumers manage their spending more effectively.

Merchants may continue to strengthen UPI as a convenient payment facility for routine and retail transactions by ensuring smooth and reliable payment acceptance. Digital payment service providers can focus on transaction reliability, security and user confidence while promoting responsible usage.

The significant differences observed across age, occupation and monthly income suggest that awareness initiatives may be designed with consideration for the spending patterns of different consumer groups. Such initiatives can emphasise responsible digital payment usage and greater awareness of spending behaviour.

Overall, the findings suggest that the convenience of UPI should be complemented by appropriate consumer awareness so that the benefits of cashless payments can be realised without encouraging unplanned or excessive spending.

9. CONCLUSION

The present study highlights the behavioural implications of UPI-based digital payments among consumers in Kanyakumari District. The findings confirm that UPI usage has a significant positive relationship with consumer spending behaviour, with frequent and convenient use of UPI associated with changes in spending patterns. Demographic differences further indicate that consumer characteristics influence the extent of behavioural change.

The study contributes to the growing literature on digital payment behaviour by providing district-level evidence from Kanyakumari. It underscores that UPI is not merely a technological innovation but also a behavioural driver of consumption. For consumers, the convenience of UPI may encourage higher spending; for merchants, UPI adoption can enhance transaction efficiency and sales; and for policymakers, the findings highlight the importance of promoting responsible digital payment usage and consumer awareness in the cashless economy.

However, the study is limited by its reliance on convenience sampling and its focus on a single district. Future research could extend the analysis to multiple districts, employ longitudinal designs, and explore psychological mechanisms underlying the cashless effect. Such studies would deepen understanding of how digital payment technologies continue to reshape consumer behaviour in India's evolving financial ecosystem.

10. LIMITATIONS AND SCOPE FOR FURTHER RESEARCH

The study is confined to Kanyakumari District and is based on responses from 300 respondents; therefore, the findings may not be generalizable to other geographical regions or larger populations. The study focuses specifically on UPI-based digital payments and consumer spending behaviour and does not examine other digital payment methods separately.

Future studies may extend the research to other geographical regions, compare different digital payment methods, and examine additional behavioural factors associated with digital payment usage. Comparative studies across different consumer groups may also provide further understanding of the relationship between digital payments and spending behaviour.

11. REFERENCES

1. Dev, R., Kumar, S., & Patel, A. (2024). Impact of UPI on consumer spending behaviour in India. *Journal of Digital Finance*, 12(3), 45–62.
2. Jacob, M., Thomas, R., & Singh, P. (2024). UPI adoption among low-income consumers: Behavioural intention and usage. *International Journal of Consumer Studies*, 48(2), 210–225.
3. Jiang, L. (2022). Mobile payment and consumer purchasing decisions: Evidence from field and laboratory experiments. *Journal of Consumer Research*, 49(1), 88–105.
4. Li, Y., Ruan, Z., & Wang, H. (2024). Digital payments and consumption behaviour in India: Evidence from demonetisation. *Economic Development and Cultural Change*, 72(4), 765–789.
5. Schomburgk, J., Belli, F., & Hoffmann, C. (2024). The cashless effect: A meta-analysis of payment methods and consumer spending. *Journal of Retailing and Consumer Services*, 78, 103–118.
6. National Payments Corporation of India. (n.d.). Unified Payments Interface (UPI) product statistics. NPCI. NPCI UPI Product Statistics
7. Reserve Bank of India. (2024). Annual report 2023–24. Reserve Bank of India.