Research Article

Soiled And Mutilated Currency: An Examination Of Exchange Methods And Awareness Among Keralites

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ARTICLE INFO	ABSTRACT
	This research delves into the awareness and strategies utilized by residents of Kerala when exchanging torn and damaged currency. It explores the success of government measures, evaluates the financial impact of damaged currency, and puts forth suggestions for improving the exchange system. Keeping in mind the specific hurdles faced by the people of Kerala, this study strives to offer valuable insights that can streamline the currency exchange process, making it more convenient and accurate for all. The implications of these findings will be valuable for policymakers and stakeholders, fostering progress in the exchange of damaged currency to benefit a diverse range of individuals. This is a study conducted in Kerala with a sample size of 274 collected through a questionnaire which consisted of 27 questions. The study of data is performed with the support of excel and spss. The major outcomes of the study are that of the participants are not aware of the policies handling soiled and mutilated notes. Most of them came across soiled and mutilated notes but somehow, they managed and it was not on the way it to be.

Introduction

Soiled and mutilated currency notes, representing instances of wear and damage, introduce a detailed aspect to the intricate world of monetary circulation. Soiled notes, marked by stains, dirt, or imperfections due to regular use, and mutilated notes, exhibiting considerable damage such as tears or alterations suggest a closer examination of their impact on the currency ecosystem. Currency notes are highly important for a country's economy because they directly reflect the confidence that people have in the economic system. Exploring the historical development of currencies which is rooted from the evolution of coinage, reveals the profound influence of figures like Chanakya, also known as Kautilya emphasised on the importance of standardized currency, consistency in weight and measurement of the coin played an important role in shaping the economy across the Mauryan Empire.

After the independence big changes started to happen in the Indian monetary system. Such as the RBI took in charge for issuing and controlling the Indian Rupee. They introduced some key changes such as the introduction of bigger denomination notes and other changes like getting rid of old and overused currencies and started improving payment methods with the help of digitalisation. But the problem of soiled and mutilated notes still exists. For this the RBI has also introduced different methods to exchange them at banks or with the RBI itself without much paperwork. Key features of these notes such as issuer details, elements and symbols like Mahatma Gandhi figure and Ashoka underscores the authenticity and value. The refund process for these notes are carried out by aligning with RBI guidelines and thereby facilitating seamless exchanges across these channels.

To simplify the process even more they introduced the concept of Triple Lock Receptacle (TLR) which can be obtained from all regional offices of RBI and people can access these TLR covers against a paper token by providing a mechanism to submit details and damaged notes for replacement with the help of a box kept at enquiry counter ensuring currency management.

Review of literature

An attention to detail is necessary regarding the issue of soiled and mutilated currency. Hence this review of literature aims to examine the articles related to this field by going through its themes and conclusions and how it relates to our topic.

The study by (Vidula Meshramb, 2023) that is concerned with currency analysis and algorithm testing helped to understand need of currency enhancement that is needed. The study assesses current classification of algorithms and made novel recommendations to improve the effectiveness of currency processing. And found that training machine learning models for automatic identification may be the focus of future research.

The study by (Sonia Sarkar, 2022) delved into the details of Indian currency and its authenticity, emphasizing security features such as threads, watermarks, and microprinting. For the benefit of central banks, legislators, financial institutions, and law enforcement agencies, these findings may be helpful in taking guiding decisions about enhanced currency designs and security measures. Through its insights into the features of currency and their implications for security and management, the study strengthens public trust that is within the monetary system and increases awareness of the risks associated with counterfeiting.

The study conducted by (Santhana Bharathi S, 2021) on the microbiological contamination of Indian banknotes emphasize how crucial it is to comprehend currency-related issues for public health and efficient policy implementation. What connects with the topic of our study is that both studies stresses that in order to enhance the currency management procedures there is a need for efficient strategies, digital platforms, various initiatives, and public announcements.

Study by (Pinki, 2017) is concentrated mainly on the security features of Indian rupee notes. Strong security measures are crucial for maintain public trust and safeguarding currency integrity. This study is focused on the effectiveness and utility of its various security measures, whereas our study assesses the knowledge and satisfaction of initiatives in connection with soiled and mutilated notes. Both studies stress the currency management.

The study of (Syed Ejaz Ali, 2014) examine the difficulties in recognizing and authenticating Indian currency denominations. They draw attention to the necessity of legislators taking decisive action to address issues with technology limitations, regulatory frameworks, instances of counterfeit goods, and user behavior that affects authentication processes. To further enhance currency management, the research suggests funding investments in verification technologies, changes to the law, and public awareness campaigns. Our study also emphasis the need of advancement in knowledge regarding currency management strategies.

The study of (C. Srinivasan, 2014) on decision-making regarding soiled and mutilated notes is in connection with our topic as aspects of currency management such as the concern regarding durability, the perception of the public , are the focus of both studies. To understand the impact of these old and overused currency notes on satisfaction, hygiene, counterfeit detection rates, and quality of the currency, they had employed surveys, data analysis and qualitative research.

Statement of the problem
The literature review shows that there is an absence of studies addressing other key aspects of soiled and mutilated notes specifically within the context of Kerala. Hence our article aims to fill this research gap by examining the level of awareness in residents regarding the policies by RBI and satisfaction of these government initiatives regarding soiled and mutilated notes concentrating on Kerala . By delving into this unknown territory our study tries to contribute in providing valuable insights that helps in the understanding of policy awareness among the residents of Kerala. The observations of this research have the potential to form base for future studies that may contribute in further enriching policymaking and enhance financial literacy initiatives within India and Kerala context, in particular.

Objectives
- To examine the awareness level of soiled and mutilated currency among Keralites.
- To assess the effectiveness in government initiatives regarding exchange of soiled and mutilated currency.
- To make recommendations for improving the exchange of soiled and mutilated currency.

Research Methodology

With an emphasis on Kerala specifically, the study attempts to investigate attitudes and issues on soiled and mutilated banknotes in India. A convenient sampling was used to administer a questionnaire-based survey with a target sample size of 274 respondents. A quantitative technique was employed to collect data in raw format. Secondary data from reports were included. Descriptive statistics, such as percentages, spss tools such as chi square, ANOVA, correlations are used throughout the study to evaluate the data and display the results in pie charts and histograms. The approach aims to give thorough insights into Keralites experiences and degree of knowledge of damaged banknotes, which will help to clarify the problem and guide future initiatives to deal with related difficulties.

Data and Discussion

Chart showing percentage of people who came across soiled and mutilated notes awareness of certain policies regarding soiled and mutilated notes.
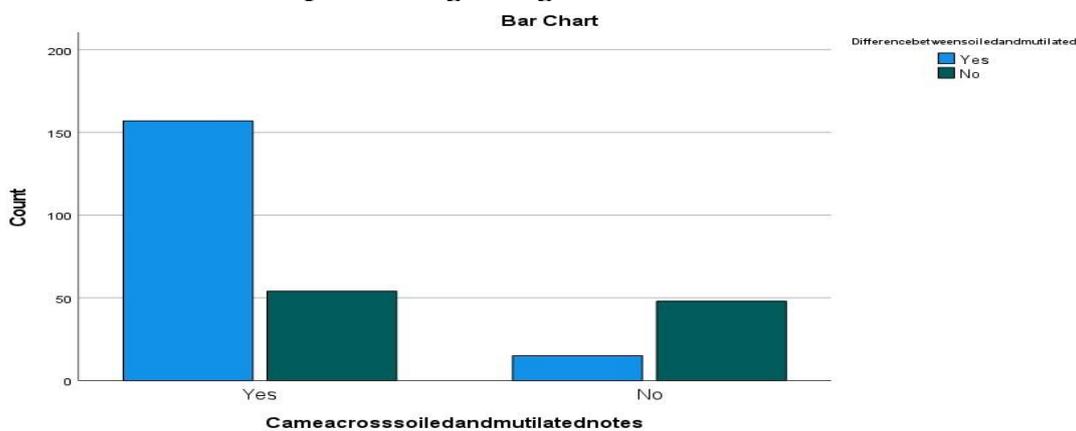
Source: Primary data
From the chart it is evident that a significant number of respondents have come across soiled and mutilated notes, as indicated by the tall blue bar under "Yes." This suggests that encountering such notes is a relatively common experience among the survey participants.
When it comes to the knowledge of the difference between soiled and mutilated notes, the respondents who have come across such notes are split. A smaller number of them, represented by the green bar under "Yes," are aware of the difference, while a larger group, indicated by the blue bar, do not know the difference. For those who answered "No" to having come across soiled and mutilated notes, a very small number, shown by the green bar, know the difference between the two, while the majority, indicated by the blue bar, do not. Overall, the chart suggests that while encountering soiled and mutilated notes is common, there is a lack of knowledge about what differentiates them, which could be an area of focus for financial education.

Chart showing confidence of knowledge in currency exchange methods in India and b government initiatives.
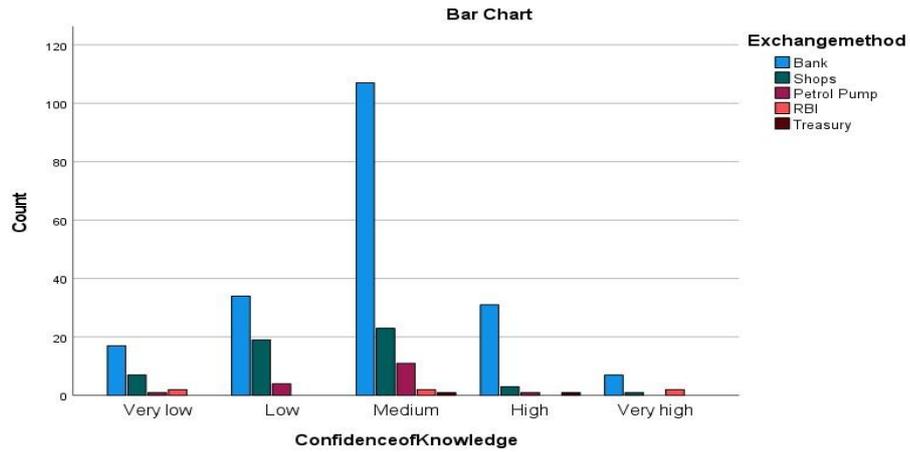
Source: Primary data

According to the chart, the majority of respondents said they preferred exchanging money at banks, with private employees having the greatest preference. This is because banks are dependable, safe, and easy to deal with when it comes to dirty or damaged notes. Because they are more knowledgeable or confident, they might select banks because they are familiar with the procedure. A greater proportion of respondents who are medium-to-high confident or knowledgeable about currencies are government employees; these respondents are probably inclined to use official channels such as the Treasury or RBI. By comprehending these dynamics, policymakers and financial institutions can better customize their offerings to cater to the needs of various demographic groups.

Chart showing the denominations of currency where soiled and mutilated currency mostly have encountered.
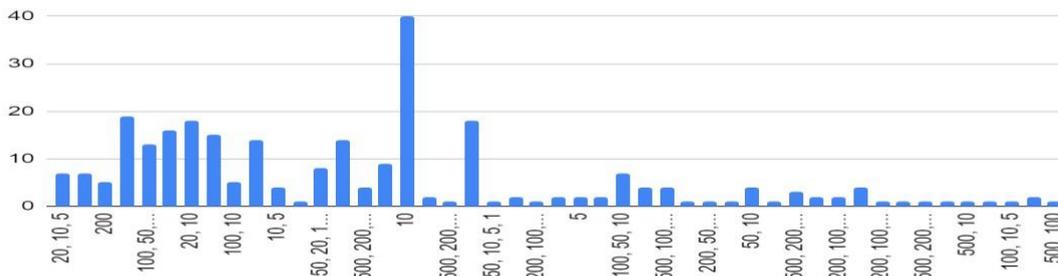
Source: Primary data

The chart shows that the occurrence of soiled and mutilated note is found mostly in 10rupee notes emphasizing the demand for a better quality. This may be due to the extensive use of this note as demand of various products or availability of factors in that price range is comparatively higher .This shows that better quality printing techniques are need to be employed in these notes and strict quality control measures are to be taken. This can be achieved by the combined efforts of central bank, government organizations and currency printing presses.

Chart showing where respondents have faced challenges while exchanging soiled and mutilated currency.
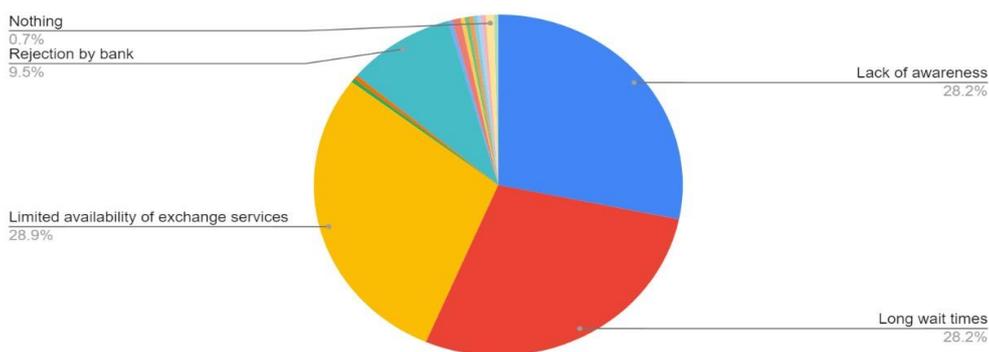
Source: Primary data

The chart shows the difficulties that most of the individuals has encountered while attempting to exchange soiled and mutilated notes. The main reasons are limited availability of exchange services, long wait times and lack of awareness. The low financial literacy may be the cause of this problem. The combined effort of key authorities may help in bridging this gap.

Secondary data observation.

Table: Showing the disposal of soiled notes as per RBI report (Pieces in lakhs).

Disposal of Soiled Banknote (April to March)			
Denomination (₹)	**2019-20**	**2020-21**	**2021-22**
2000	1,768	4,548	3,847
1000	-	-	-
500	1,645	5,909	22,082
200	318	1,186	6,167
100	44,793	42,433	59,203
50	19,070	12,738	27,696
20	21,948	10,325	20,771
10	55,744	21,999	46,778
Up to 5	1,244	564	1,257
Total	1,46,530	99,702	1,87,801

Source: Secondary data

The data in the table shows the disposal of soiled notes in India from April to March over three fiscal years, from 2020-21 to 2022-23. The data which is taken from the RBI indicates the quantities of various denominations of notes that were removed from circulation mainly due to unfit for further use. Some trends that can be seen are there is an increase in the total number of soiled notes disposed of over the mentioned period which reflects wear and tear or usage. Among the denominations ₹500 notes stand out with significant disposal quantities experiencing a rise from 22,082 lakh pieces in 2021-22 to 51,092 lakh pieces in 2022-23. This surge may signify the quality of the ₹500 denomination in circulation or changes in usage patterns. Similarly, the ₹200 notes also witnessed an increase in disposal quantities over the years. The disposal quantities of ₹2000 notes decreased slightly in 2021-22 but increased in 2022-23. However, as per our study, most of the respondents have encountered 10 rupee notes as soiled and mutilated. The data shows the continuous efforts by the RBI in currency management and the need for constant monitoring required for the replacement of soiled notes to ensure the smooth functioning of the monetary system in India as a whole.

Table 1 showing the crosstabulation of location and policy awareness.

Ho : There is no association between location and policy awareness regarding soiled and mutilated notes.
 H1 : There is significant association between location and policy awareness regarding soiled and mutilated notes.

Location * Policy awareness Crosstabulation					
			Policy awareness		Total
			Yes	No	
Location	South	Count	31	68	99
		% within Location	31.3%	68.7%	100.0%
		% within Policy awareness	28.7%	41.0%	36.1%
		% of Total	11.3%	24.8%	36.1%
	Central	Count	54	82	136
		% within Location	39.7%	60.3%	100.0%
		% within Policy awareness	50.0%	49.4%	49.6%
		% of Total	19.7%	29.9%	49.6%
	North	Count	23	16	39
		% within Location	59.0%	41.0%	100.0%
		% within Policy awareness	21.3%	9.6%	14.2%
		% of Total	8.4%	5.8%	14.2%
Total		Count	108	166	274
		% within Location	39.4%	60.6%	100.0%
		% within Policy awareness	100.0%	100.0%	100.0%
		% of Total	39.4%	60.6%	100.0%

Source: Primary data

Chi-Square Test					
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2sided)	Exact Sig. (1sided)
Pearson Chi-Square	8.476[a]	1	.004		
Continuity Correction[b]	7.769	1	.005		
Likelihood Ratio	8.491	1	.004		
Fisher's Exact Test				.004	.003
Linear-by-Linear Association	8.446	1	.004		
N of Valid Cases	274				

Source: Primary data

Differential policy awareness in North, South, and Central Kerala highlights the need for customized outreach approaches to address different awareness levels. Although 41% of people in North Kerala are aware of policies, large percentages of people in South Kerala (31.3%) and Central Kerala (39.7%) are not aware of any policies at all, meaning that 60.3% of the population is in the dark. This emphasizes the need for programs created especially to address the sociocultural dynamics and communication channels of each region. Policymakers can optimize the efficacy of their endeavors by acknowledging the distinct requirements of every region and executing customized outreach strategies, especially in North Kerala where the level of awareness is highest. Continuous evaluation and regular adjustments to outreach tactics are essential for enhancing public policy. Another angle to the conversation is the substantial correlation between gender and policy awareness as demonstrated by Chi-Square tests. The null hypothesis was rejected across a range of statistical measures, and p-values less than 0.05 indicate a significant relationship between gender and policy awareness in the sample population. Given that gender influences people's awareness of policies, gender-specific considerations must be made in policy communication strategies. More inclusive approaches can be informed by an understanding of the ways in which communication preferences and gender dynamics intersect. Policymakers can guarantee that policy information reaches all societal segments and promote equitable distribution and increased civic engagement by recognizing and resolving these disparities.

Table 2 showing the comparison of knowledge of government initiatives and gender.
H0 : There is no association between knowledge of government intitatives and gender regarding soiled and mutilated notes.
 H1 : There is a significant association between knowledge of government initative and gender regarding soiled and mutilated notes.

Knowledge of govt initiatives * Gender Crosstabulation					
			Gender		Total
			Male	Femal e	
Knowledge of govt initiatives	Strongly Agree	Count	33	28	61
		% within Knowledge of govtinitatives	54.1%	45.9%	100.0 %
		% within Gender	26.4%	18.8%	22.3%
		% of Total	12.0%	10.2%	22.3%
	Agree	Count	24	25	49
		% within Knowledge of govt initiatives	49.0%	51.0%	100.0 %
		% within Gender	19.2%	16.8%	17.9%
		% of Total	8.8%	9.1%	17.9%
	Neutral	Count	41	59	100
		% within Knowledge of govt initiatives	41.0%	59.0%	100.0 %
		% within Gender	32.8%	39.6%	36.5%
		% of Total	15.0%	21.5%	36.5%
	Disagree	Count	20	18	38
		% within Knowledge of govt initiatives	52.6%	47.4%	100.0 %
		% within Gender	16.0%	12.1%	13.9%
		% of Total	7.3%	6.6%	13.9%

				7	19	26
	Strongly Disagree	Count		7	19	26
		% within Knowledge of govt initiatives		26.9%	73.1%	100.0 %
		% within Gender		5.6%	12.8%	9.5%
		% of Total		2.6%	6.9%	9.5%
Total		Count		125	149	274
		% within Knowledge of govt initiatives		45.6%	54.4%	100.0 %
		% within Gender		100.0 %	100.0 %	100.0 %
		% of Total		45.6%	54.4%	100.0 %

Source: Primary data

The information shows that different genders have different answers when it comes to knowing about government initiatives. Although a considerable proportion of participants exhibit ambivalence and fall into the "Neutral" category, a noteworthy proportion strongly concurs with their awareness. Still, a sizeable portion of the population is unsure of what they understand. Particularly in the "Strongly Disagree" category, where there is a gender gap, gender differences become apparent. This implies that women are more disapproving. The existence of unhappy people highlights weaknesses in the methods used to disseminate knowledge. In order to create inclusive policies and interventions, it is essential to comprehend gender dynamics. Investigating the underlying causes is crucial. Encouraging equal access to information and addressing knowledge gaps are essential to building an informed populace and just society. Gender inequality in government understanding must be addressed if inclusive policymaking is to take place.

Table 3 ANOVA among Satisfaction of government initiatives and Qualification
Ho : There is no association between government initiative satisfaction among individuals and their qualifications.
H1: There is an association between government initiative satisfaction among individuals and their qualifications.

Descriptive Statistics					
	N	Minimu m	Maximu m	Mean	Std. Deviation
Qualification	274	1	7	3.58	.916
StatementofGovtinitiative satisfaction	274	1	5	2.70	1.058
Valid N (listwise)	274				

Source: Primary data

ANOVA					
StatementofGovtinitiativesatisfaction					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17.770	6	2.962	2.745	.013
Within Groups	288.087	267	1.079		
Total	305.858	273			

Source: Primary data

The ANOVA results indicate a statistically significant F-statistic of 2.745 with the p-value of 0.013. This p-value is below the significance level of 0.05, suggesting the proof to reject the null hypothesis. In other words, the data provides sufficient evidence to conclude that there is a wide gap in government initiative satisfaction in the group of individuals with different qualifications.

Multiple Comparison						
Dependent Variable: StatementofGovtinitiativesatisfaction						
Tukey HSD						
(I) Qualification	(J) Qualification	Mean Difference	Std. Error	Sig	95% Confidence Interval	
					Lower Bound	Upper Bound
High school education	Higher Secondary education	.800	.657	.887	-1.15	2.75

	Bachelor's Degree	1.192	.607	.441	-.61	3.00
	Master's Degree	.748	.608	.881	-1.06	2.55
	Doctorate or Professional Degree	1.333	.648	.381	-.59	3.26
	Diploma	.667	.717	.967	-1.46	2.80
	ITI	.667	.848	.986	-1.85	3.19
Higher Secondary education	High school education	-.800	.657	.887	-2.75	1.15
	Bachelor's Degree	.392	.285	.814	-.45	1.24
	Master's Degree	-.052	.286	1.000	-.90	.80
	Doctorate or Professional Degree	.533	.363	.763	-.55	1.61
	Diploma	-.133	.475	1.000	-1.55	1.28
	ITI	-.133	.657	1.000	-2.09	1.82
Bachelor's Degree	High school education	-1.192	.607	.441	-3.00	.61
	Higher Secondary education	-.392	.285	.814	-1.24	.45
	Master's Degree	-.444*	.138	.024	-.85	-.03
	Doctorate or Professional Degree	.141	.263	.998	-.64	.92
	Diploma	-.525	.404	.851	-1.73	.68
	ITI	-.525	.607	.977	-2.33	1.28
Master's Degree	High school education	-.748	.608	.881	-2.55	1.06
	Higher Secondary education	.052	.286	1.000	-.80	.90
	Bachelor's Degree	.444*	.138	.024	.03	.85
	Doctorate or Professional Degree	.585	.264	.291	-.20	1.37
	Diploma	-.082	.405	1.000	-1.28	1.12
	ITI	-.082	.608	1.000	-1.89	1.72
Doctorate or Professional Degree	High school education	-1.333	.648	.381	-3.26	.59
	Higher Secondary education	-.533	.363	.763	-1.61	.55
	Bachelor's Degree	-.141	.263	.998	-.92	.64
	Master's Degree	-.585	.264	.291	-1.37	.20
	Diploma	-.667	.463	.779	-2.04	.71
	ITI	-.667	.648	.947	-2.59	1.26
Diploma	High school education	-.667	.717	.967	-2.80	1.46
	Higher Secondary education	.133	.475	1.000	-1.28	1.55
	Bachelor's Degree	.525	.404	.851	-.68	1.73
	Master's Degree	.082	.405	1.000	-1.12	1.28
	Doctorate or Professional Degree	.667	.463	.779	-.71	2.04
	ITI	.000	.717	1.000	-2.13	2.13
ITI	High school education	-.667	.848	.986	-3.19	1.85

Higher Secondary education	.133	.657	1.000	-1.82	2.09
Bachelor's Degree	.525	.607	.977	-1.28	2.33
Master's Degree	.082	.608	1.000	-1.72	1.89
Doctorate / Professional Degree	.667	.648	.947	-1.26	2.59
Diploma	.000	.717	1.000	-2.13	2.13

Source: Primary data

Examination at every qualification level highlights minute differences in the degree of satisfaction with governmental initiatives. The mean differences in satisfaction scores between respondents who completed high school and those who did not are 0.800, 1.192, 0.748, 1.333, 0.667, and 0.667 for Higher secondary education , Bachelor's degree , Master's degree ,

Doctorate/Professional degree, Diploma, and ITI respectively. There may be similarities in satisfaction levels amongst these educational tiers, as evidenced by the lack of statistical significance in the differences in satisfaction with Bachelor's, Master's, Doctorate, and Professional Degree qualifications. Comparably, within Higher Secondary education, there is less of a statistically significant difference in mean scores compared to other qualifications, indicating comparatively uniform levels of satisfaction across educational levels. Of particular note is the statistically significant mean difference of -0.444 that is revealed when comparing Bachelor's and Master's degrees. From the information provided in the multiple comparison table, we can determine that individuals with Master's Degrees were more satisfied with government initiatives compared to those with Bachelor's Degrees. This conclusion is drawn from the statistically significant difference observed between Master's Degrees and Bachelor's Degrees, where the mean difference is -0.444 with a significance level (p-value) of 0.024. Therefore, based on this analysis, individuals with Master's Degrees exhibited higher satisfaction levels with government initiatives compared to those with Bachelor's Degrees.

Table 4 showing the correlation of knowledge of government initiatives and satisfaction of government initiatives .
H0 : There is no correlation between knowledge of government initiatives and satisfaction with government initiatives among individuals.
H1 : There is a correlation between knowledge of government initiatives and satisfaction with those initiatives among respondents.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std Deviation
Knowledgeofgovtinitatives	274	1	5	2.70	1.227
StatementofGovtinitiativesatisfaction	274	1	5	2.70	1.058
Valid N (listwise)	274				

Source: Primary data

Correlations			
		Knowledgeofgovtinitatives	StatementofGovtinitiativesatisfaction
Knowledgeofgovtinitatives	Pearson Correlation	1	.326**
	Sig. (2-tailed)		.000
	N	274	274
StatementofGovtinitiativesatisfaction	Pearson Correlation	.326**	1
	Sig. (2-tailed)	.000	
	N	274	274

Source: Primary data

The descriptive statistics reveal that both the mean knowledge of government initiatives (M = 2.70, SD = 1.227) and the mean satisfaction with government initiatives (M = 2.70, SD = 1.058) are relatively similar in this sample of 274 individuals. However, examining the correlations indicates a moderately positive relationship between knowledge and satisfaction (r = 0.326, p < .001). This suggests that individuals with higher levels of knowledge regarding government initiatives tend to report higher levels of satisfaction with those initiatives. The significant correlation underscores the importance of understanding government initiatives as it relates

to satisfaction levels. This finding could inform policymakers and stakeholders about the potential benefits of improving public awareness and understanding of government initiatives to enhance overall satisfaction and engagement with governmental policies and programs.

Concluding observations

The study highlights the need for improved exchange facilities for damaged notes, such as ATMs, cash deposit machines, and cash recycler machines, in order to enable simple replacement. Campaigns and educational seminars can increase public awareness and assist in resolving currency-related problems. Currency conversion can be facilitated by electronic payment methods and modern technology. To solve problems with currency exchange, customer service is essential. The lifespan of currency notes can be extended by applying plastic coatings. Finally, strengthening the resilience of banknotes can be achieved by using premium materials, advanced printing processes, and stringent quality control measures. To solve the problem, a multifaceted approach is required, involving increasing public awareness, creating innovative safeguards, improving accessibility, developing technology, and enhancing customer service. The study also emphasizes the necessity of awareness-raising events and knowledge about the currency exchange methods, and it was also found that majority of the general public has not seen an advertisement regarding the currency exchange even though RBI has made advertisement across the social media platforms which indicates the need of further awareness via other platforms.

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