

BEHAVIOUR FINANCE STRATEGIES: THE ROLE OF NUDGE THEORY IN ENHANCING FINANCIAL WELL-BEING IN INDIA'S MUTUAL FUND LANDSCAPE

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The financial sector has transformed in the last decade and with array of products and options, the application of behavioural economics and especially the Nudge theory can prove as a great tool to increase participation, aiding last mile delivery of incentives leading to Financial wellbeing of citizens. The research examines the application in Indian Mutual fund Industry, which is one of the fastest growing sectors among financial services. With a population of 144 crores, there are only 3.5 crores Indian mutual investors which underlines the need of using the Nudge theory effectively to increase investor base. The research explores the various nudge methods such as default options, framing, simplification and social proof and its impact on positive financial behaviours. The study has used literature review and interview of the stakeholders to present both the theoretical and practical aspects. The findings of the study indicate that effective application of the nudge techniques such as simplified documentation, auto-enrolment, fintech nudges and peer success stories have shown transformative and tangible impact on investor behaviours leading to higher participation. The analysis of the expert interview further confirms the practical application of the successful nudges and suggests options like digital platforms, financial literacy and regulatory and policy push to help effectively integrate nudges in market framework. In conclusion, to achieve the vision of a financially empowered nation, adopting and applying nudges will be an effective instrument for Financial inclusion and Financial wellbeing.

Keywords: NUDGE THEORY, MUTUAL FUND, financial behaviours

Introduction

The term "nudge" has been used in behavioural economics and refers to a concept where positive behaviour is reinforced by indirect suggestions leading to altering behaviour and choices in a predictable way, but not denying the person of its benefits and incentives. The Nudge Theory's proponents (Thaler and Sunstein 2008) in their path-breaking research examine how human behaviour is influenced by various biases and how behavioural design can subtly change choices and decision making. The theory has had successful applications in various industries and even in political campaigns. Some of the developed countries like Australia, United Kingdom have acknowledged this as a tool and set up Nudge units for effective implementation of citizen welfare schemes. The theory has also been appreciated and by Indian Government officials and policy makers (BT, 2023) and deeply acknowledges its crucial role in customizing

economic policies and schemes to help spread public welfare benefits and address the challenge of financial inclusion. The hallmark initiatives which have conceptually used this concept include the 'Beti Bachao, Beti Padhao' campaign, which has helped in removing gender disparity. Other examples like Jan Dhan Yojna and opening bank accounts nudged Indian citizens towards joining financial mainstream and improved financial inclusion.

In the context of financial services, nudges can be employed to promote positive financial decision-making and enhance financial well-being. The study is to explore and evaluate the adoption and effectiveness of nudge theory within Indian financial services, especially focusing on mutual funds. The Indian Mutual Fund (MF) industry has been growing steadily over the years, but the penetration level is still low compared to developed markets. Given India's massive population and the potential for growth, there is a need to bring more investors into the fold. Given the Reserve Bank of India report (2023) data of only 3.5 crores of mutual fund investors against population of 144 crores indicating a very low participation therefore understanding the role of nudges becomes pivotal.

The objective of this research paper is to investigate the adoption and effectiveness of this theory and aims to understand how nudges, can be employed to promote positive financial decision-making, and enhance financial well-being among Indian investors.

Review of Literature

Research has shown that choice architecture, through techniques such as default options and framing, can significantly impact financial behaviour. Johnson and Goldstein (2003) found that automatically enrolling employees in retirement plans, with the option to opt-out, increased participation rates. Additionally, Tversky and Kahneman (1988) demonstrated how individuals' decision-making can be influenced by presenting information in different frames, such as gains or losses. Behavioural economics literature suggests that individuals often struggle with complex financial information. Financial Institutions can help in better decision making by simplifying information and using clear communication. Mullainathan and Shafir (2013) stress the crucial role of providing simplified documents and disclosures to assist individuals make the terms and conditions of financial products understandable. The importance of social norms and peer influence also play a critical role in financial decision making. This has been highlighted by Cialdini and Goldstein (2004) who explain how individual easily adopt desired behaviours if these behaviours make them socially accepted and is even adopted by their friends and peers. Akhther & Chowdhary (2018) examine how the application of the "Nudge" concept can be used to create a "user-friendly" mechanism for bank customers by helping them make well-informed choices by making them aware of the probable consequences of inaction and the benefits of taking suggested decisions. It suggests that by making them aware about overspending and encouraging saving, it helps to prevent future financial impediment and stress. To reinforce positive behaviours, social proof and peer comparisons can be incorporated by financial

service providers which can encourage individuals and permanently alter financial behaviours (Cialdini & Goldstein, 2004). According to Gupta and Verma (2019), the nudge theory has gained attention in Indian financial services due to its potential to improve financial decision making and positive financial outcomes. It suggests that nudge interventions can be deployed to address the glaring challenges of low financial literacy leading to inappropriate investment choices. By understanding the principles of choice architecture and behavioural economics, policymakers and financial institutions in India can design effective nudges that guide individuals towards better financial choices (Gupta & Verma, 2019). With advent of Artificial and Machine learning tools digital nudges are being used in financial services, but human interface will continue to be critical for decision making. (Shefrin, 2023)

Methodology

The methodology adopted has been literature review and interview of the stakeholders, the mutual fund managers, and financial advisors in the tri-city. The existing publications by regulators and policy makers like RBI, SEBI, and AMFI were reviewed. Also, the stakeholders who are in touch with the investors like individual financial advisors and business heads of mutual fund companies were interviewed. A total of twenty interviews were conducted and thus study includes the insights of existing research and real-world perspectives. Therefore, research content analysis techniques have been used to extract insights from interviews and reports.

RESULTS & FINDINGS

The RBI has adopted a multi stakeholder approach and bank-led model for financial inclusion wherein various government schemes are being promoted by bank through its branches (RBI, 2020). It has recommended involving various financial institution. Securities and Exchange Board of India (SEBI) with initiatives to educate investors about the securities market, providing resources for informed investment decisions, Insurance Regulatory and Development Authority of India (IRDAI) to inform public about insurance products, the importance of risk management, Association of Mutual Funds in India (AMFI) spreading awareness about mutual fund investments, benefits, and associated risks to foster a culture of investment among the masses and Pension Fund Regulatory and Development Authority (PFRDA) which aim to educate individuals about pension schemes and retirement planning, ensuring long-term financial stability.

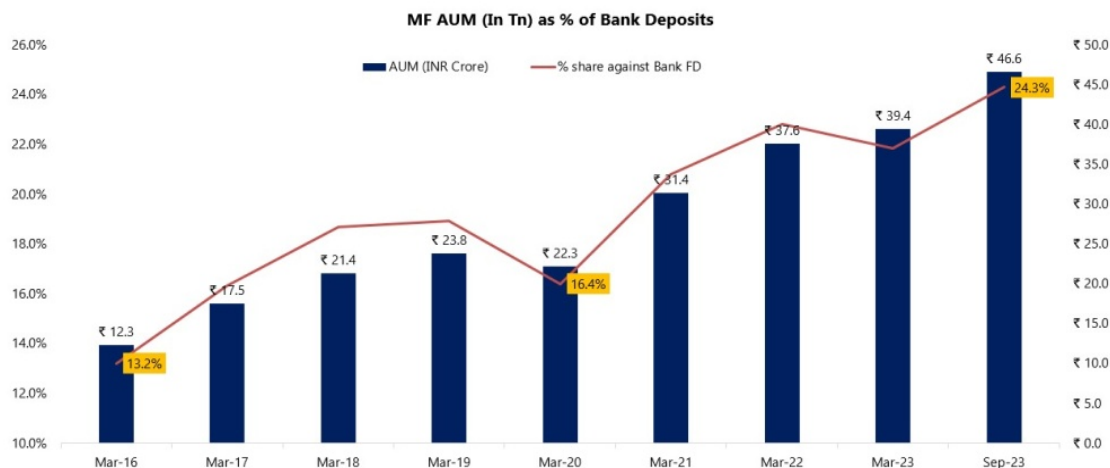
The 5 C' Approach for Financial Education Dissemination:

- **Content:** Develop financial literacy materials tailored to diverse groups such as students, adults, women, workers/entrepreneurs, senior citizens, disabled persons, illiterate individuals, etc.
- **Capacity:** Build the capability of intermediaries in delivering financial literacy;

- **Community:** Create sustainable community-based methods for financial literacy dissemination.
- **Communication:** Utilize technology, media, and innovative communication strategies; plan annual focused campaigns; and employ public spaces for outreach.
- **Collaboration:** Use information dashboards; incorporate financial literacy in educational curricula and professional/vocational courses; integrate financial education into existing programs; and coordinate efforts among stakeholders

All the above have been policy nudges which have helped in financial product awareness and growth of the mutual fund industry

The secondary data reviewed gave an insight on the growth of Indian mutual fund industry. Mutual fund investments by households hit a record Rs. 1.8 trillion during fiscal year 2022-23 for which Systematic Investment Plans (SIPs) significantly contributed to this growth (IBEF, 2023). The key to these is to simplify processes and use of technology to reimagine investor experience. Also, it stresses on investor education and partnerships (AMFI, 2019)



Source: RBI, AMFI, Fisdrom Research. Bank FD data available till July 2023

Interviews were conducted to understand the nudges used various government schemes and mutual funds in specific to understand the impact of all the policy impact of initiatives. The results of these interviews on 10 questions asked, were analyzed on SPSS and given below are findings. +

Frequency statistics

		Statistics			
		In which post are you working?	What is your working experience?	In which way senior citizen behaviour is nudged in the financial service domain?	In which way business persons were getting facilities from nudging accounts
N	Valid	20	20	43	20
	Missing	979	979	956	979
Mean		2.00	4.90	8.86	13.50
Std. Error of Mean		.178	.176	.196	.267
Median		2.00	5.00	9.00	13.00
Mode		2	5	9	13 ^a
Std. Deviation		.795	.788	1.283	1.192
Variance		.632	.621	1.647	1.421
Skewness		.000	.186	.060	.104
Std. Error of Skewness		.512	.512	.361	.512
Kurtosis		-1.366	-1.308	-.991	-1.527
Std. Error of Kurtosis		.992	.992	.709	.992
Range		2	2	4	3
Minimum		1	4	7	12
Maximum		3	6	11	15

Figure 1: Frequency statistics - Part 1

(Source: SPSS)

The above table highlights the way the first 4 questions of the questionnaire allowed this research process to be authentic and valid. The acceptable standard deviation value is between (-2) and (+2); the value of this unit maintained this range properly. Furthermore, the standard error value should be near 0; in this table, the standard error value in the mentioned questions is near 0. Hence, the study through these four questions is relevant. The same can be observed for other questions as well, mentioned in Figures 2 and 3; hence, those 6 questions are also relevant in studies.

		Statistics			
		Which educational nudges so highly support Indian financial literacy?	In which way Indian financial sectors digitally nudge common people?	In which Indian banks allows common people to be a part of Indian financial progress?	In which way mutual funds guides Indians to be a part of Indian economy?
N	Valid	20	20	20	20
	Missing	979	979	979	979
Mean		17.95	21.35	25.35	29.45
Std. Error of Mean		.185	.209	.233	.256
Median		18.00	21.00	25.00	29.00
Mode		17 ^a	21 ^a	25 ^a	29
Std. Deviation		.826	.933	1.040	1.146
Variance		.682	.871	1.082	1.313
Skewness		.098	.055	.133	.136
Std. Error of Skewness		.512	.512	.512	.512
Kurtosis		-1.518	-.734	-1.069	-1.379
Std. Error of Kurtosis		.992	.992	.992	.992
Range		2	3	3	3
Minimum		17	20	24	28
Maximum		19	23	27	31

Figure 2: Frequency statistics - Part 2

(Source: SPSS)

Again, the acceptable value of skewness is within (-1.96) to (+1.96); all the ten questions of this questionnaire maintained this acceptable value for this research process. Again, this is also necessary to assess the range of kurtosis; Figures 1, 2, and 3 mentioned that this value is not positive, in this concern, it can be said that this kurtosis is platykurtic kurtosis. It will be effective for the development and proof of examining value. Again, the acceptable range of negative kurtosis is between (-2) to infinity. However, the negative range of kurtosis for all 10 questions is higher than (-2); in this case, this is not maintaining the authenticity of this research process.

		Statistics	
		In which way Indian finance steer common people for financial nudges?	What necessary things to maintain financial flow and activities effective?
N	Valid	20	20
	Missing	979	979
Mean		32.45	35.60
Std. Error of Mean		.114	.245
Median		32.00	36.00
Mode		32	36
Std. Deviation		.510	1.095
Variance		.261	1.200
Skewness		.218	-.149
Std. Error of Skewness		.512	.512
Kurtosis		-2.183	-1.220
Std. Error of Kurtosis		.992	.992
Range		1	3
Minimum		32	34
Maximum		33	37

Figure 3: Frequency statistics - Part 3

(Source: SPSS)

Another important part of frequency statistics is the mean or average; this value indicates the average range of put numbers or values. Question 1 has a mean value of 2, while the second has a value of 4.90; the mode value highlights the highest number of acceptable or options Hence, it can be said that most respondents are from financial advisor posts&the 2nd question fetched the highest response for “<5 years” service. The 3rd question of the questionnaire fetched the highest response for “Digital India” Campaign which promoted cashless economy by developing digital platforms for financial activities” and the next fetched that for “Stand-up IndiaScheme “empowers SC/ST and women Mode value in other questions also highlights the same, that is the highly gained options.

Analysis based on frequency and histogram

In which post are you working?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	6	.6	30.0	30.0
	2	8	.8	40.0	70.0
	3	6	.6	30.0	100.0
	Total	20	2.0	100.0	
Missing	System	979	98.0		
Total		999	100.0		

Table 1: Frequency table for question 1

(Source: SPSS).

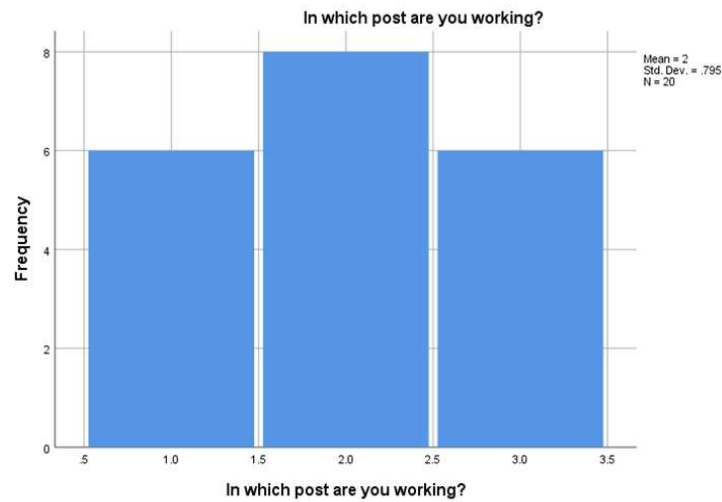


Figure 4: Histogram for question 1

(Source: SPSS)

Table 1 and figure 4 highlights the way standard deviation of the value for the first question is valid as this is between (-2) and (+2) and the research process is valid.

What is your working experience?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4	7	.7	35.0	35.0
	5	8	.8	40.0	75.0
	6	5	.5	25.0	100.0
	Total	20	2.0	100.0	
Missing	System	979	98.0		
Total		999	100.0		

Table 2: Frequency table for question 2

(Source: SPSS)



Figure 5: Histogram for question 2

(Source: SPSS)

Analysis in table 2 and figure 5 also increase value for the research process through question 2, as standard deviation value is acceptable.

In which way senior citizen behaviour is nudged in the financialservice domain?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7	8	.8	18.6	18.6
	8	9	.9	20.9	39.5
	9	12	1.2	27.9	67.4
	10	9	.9	20.9	88.4

	11	5	.5	11.6	100.0
	Total	43	4.3	100.0	
Missing	System	956	95.7		
Total		999	100.0		

Table 3: Frequency table for question 3

(Source: SPSS)

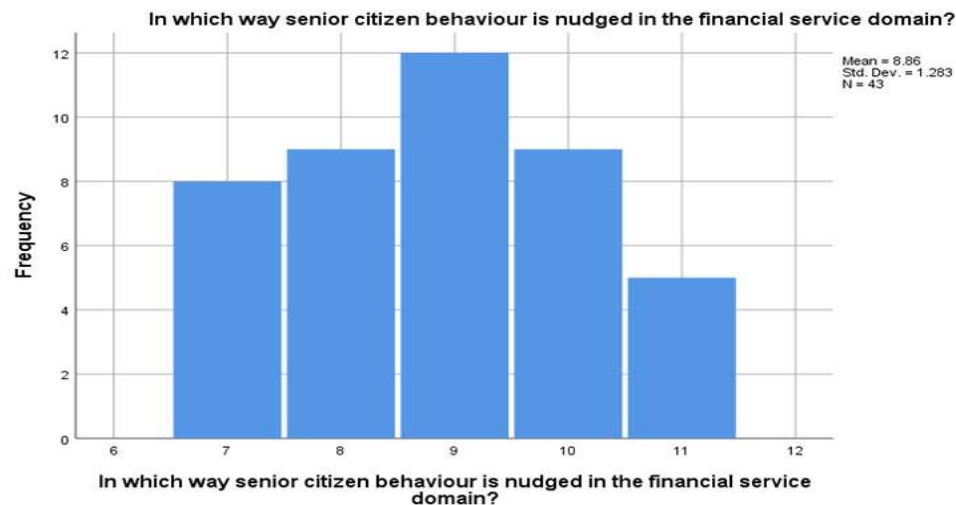


Figure 6: Histogram for question 3

(Source: SPSS)

Senior citizen's behaviour for Indian financial nudging is supporting reliability; it can be said based on the standard deviation value. According to the report of Castelino (2023), the digital payment transaction reached up to 1050 crore in the financial sector. Especially due to the Covid-19 pandemic, this digital transaction has increased its popularity among Indians. Again, the Atal Pension Yojana also promises financial support to the young Indians after their retirements. They can benefit from a monthly ₹5000 after their retirements (Wakil, 2023). Again, The National Pension System (NPS) helps employees automatically to be a part of savings plans for their retirement sessions, while the Jan Dhan Yojana ensures an insurance coverage and a 5000-overdraft facility with a bank account facility (PMINDIA, 2023). Furthermore, the facility of the Direct Benefit Transfer reduces leakage, as well as ensures transparency in formal banking channels.

In which way business persons were getting facilities from nudging accounts

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12	5	.5	25.0	25.0
	13	6	.6	30.0	55.0
	14	3	.3	15.0	70.0
	15	6	.6	30.0	100.0
	Total	20	2.0	100.0	
Missing	System	979	98.0		
Total		999	100.0		

Table 4: Frequency table for question 4
(Source: SPSS)

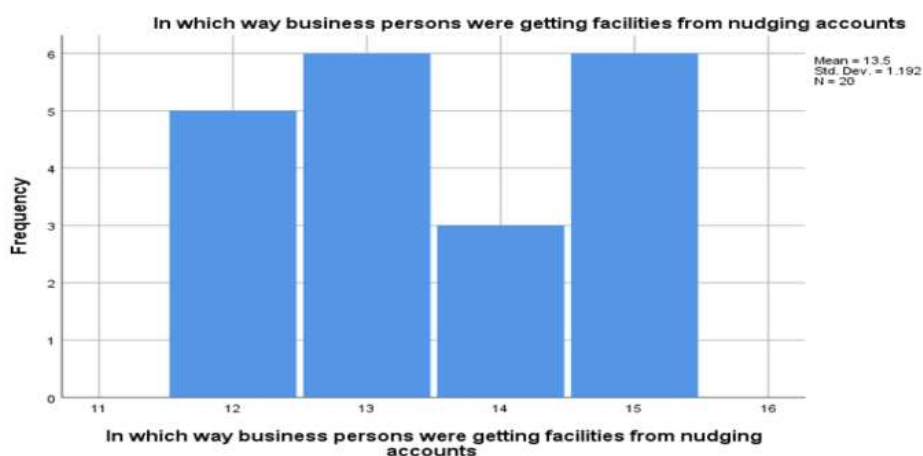


Figure 7: Histogram for question 4

Which educational nudges so highly support Indian financial literacy?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	17	7	.7	35.0	35.0
	18	7	.7	35.0	70.0
	19	6	.6	30.0	100.0
	Total	20	2.0	100.0	
Missing	System	979	98.0		
Total		999	100.0		

(Source: SPSS)

Table 4 and Figure 7 highlight the way the 2nd and 4th options got the highest value; again, the values are justified based on the accepted value of standard deviation. The Stand-up India Scheme empowers SC, ST and women for self-reliance and entrepreneurship by offering them loans and providing 1.8 lakh women and SC-ST people with ₹40600 crore (PIB, 2023a). Again, MUDRA Yojana offers micro-loans to formalize all informal businesses and assist small businesses (Ghosh, 2023). Again, UPI and BHIM promoted digital transactions for business persons and common people to smoothen financial flow among them. PM SVANidhi Scheme also financially supports street vendors with micro-credit facilities and formal credit channels to reduce dependence on money lenders. This scheme will support street vendors with up to ₹50 thousand for their business processes (PIB, 2023b).

Table 5: Frequency table for question 5

(Source: SPSS)

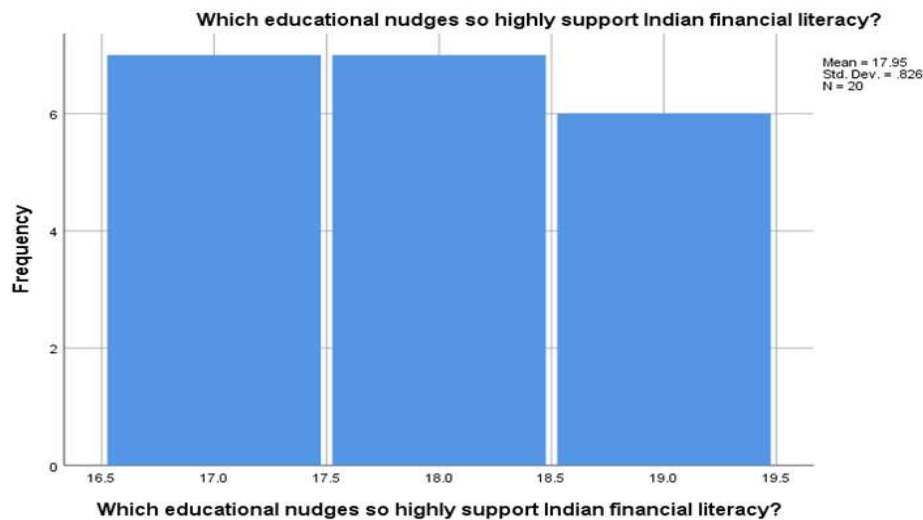


Figure 8: Histogram for question 5

(Source: SPSS)

Figure 8 and Table 5 highlight the way educational nudges are effective for Indian economic improvement through an increase in financial literacy. Financial Literacy Initiatives allow banks and economic organisations to provide Indians with workshops, webinars and financial literacy programmes. Farmers, small entrepreneurs, and self-help groups are the target persons of this scheme (RBI, 2023). It provokes better financial concepts among common people by involving them in financial quizzes. Furthermore, the promotion of transparency and testimonials for mutual funds and financial performances are necessary for maintaining and handling mutual funds.

In which way do Indian financial sectors digitally nudge common people?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	20	4	.4	20.0	20.0
	21	7	.7	35.0	55.0
	22	7	.7	35.0	90.0
	23	2	.2	10.0	100.0
	Total	20	2.0	100.0	
Missing	System	979	98.0		
Total		999	100.0		

Table 6: Frequency table for question 6
(Source: SPSS)

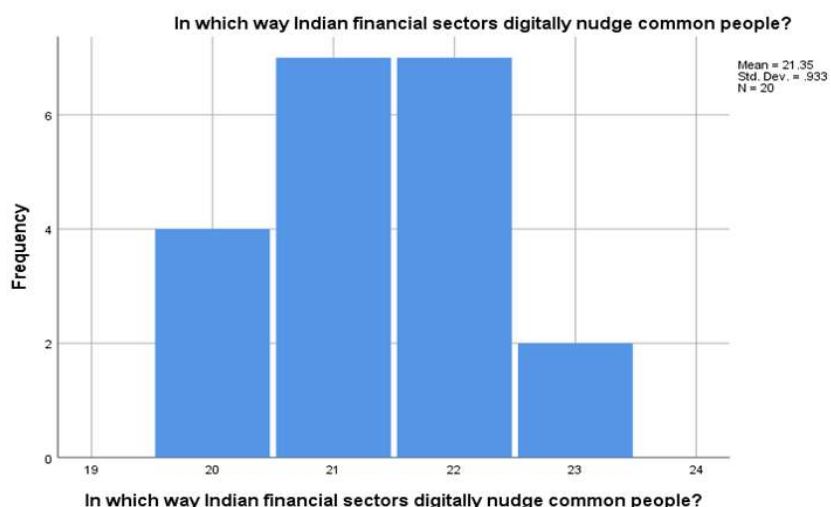


Figure 9: Histogram for question 6
(Source: SPSS)

Figure 9 and Table 6 highlights the way Indian financial field facilitates digital nudges for common people. Here, “Fintech platforms provide rewards for referring fintech platforms” and “Banking applications provide push notifications about credit card bills, important dates, and any offer” were selected as the highest in number. The standard deviation value accepts this number. Lupini (2023) that mobile credit card alerts are necessary to focus on being free from fraudulent activities; in this case, banks and financial institutions have highly positive values. Again, digital Transaction Rewards provides cash return or other rewards for digital transactions to increase interest among them. Similarly, visualization tools allow users to monitor financial and investment growth to make investment processes time-efficient and easy for the users.

In which Indian banks allow common people to be a part of Indian financial progress?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	24	5	.5	25.0	25.0
	25	6	.6	30.0	55.0
	26	6	.6	30.0	85.0
	27	3	.3	15.0	100.0
	Total	20	2.0	100.0	
Missing	System	979	98.0		
Total		999	100.0		

Table 7: Frequency table for question 7
(Source: SPSS)

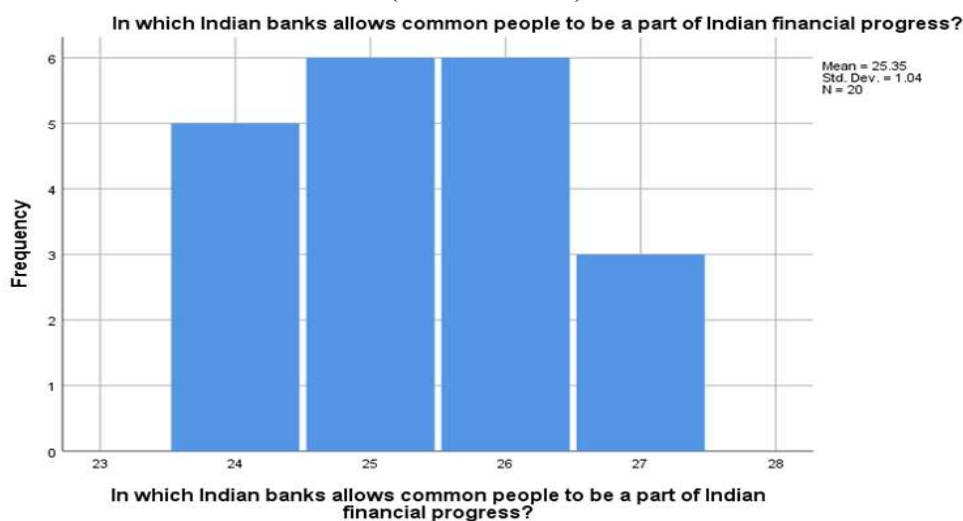


Figure 10: Histogram for question 7
(Source: SPSS)

Table 7 and Figure 10 also support the activities of Indian banks for influencing common people to be a part of India’s economic development. The standard deviation value of 1.04 supports the validity and authenticity of this research process. Securities and Exchange Board of India (SEBI) and Indian banks promoted Know Your Customer (KYC) services to simplify customers’ documents (Livemint, 2023). Colour-coded riskometer, a pictorial representation, shows associated risks for each mutual fund. In this concern, banks and other investment platforms empower social proofs for guiding investment behaviour regarding "top investor choices" and "most popular funds". Moreover, financial platforms showcase benefits individuals from a specific financial service or product to influence other common people.

Table 8: Frequency table for question 8

In which way do mutual funds guide Indians to be a part of the Indian economy?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	28	5	.5	25.0	25.0
	29	6	.6	30.0	55.0
	30	4	.4	20.0	75.0
	31	5	.5	25.0	100.0
	Total	20	2.0	100.0	
Missing	System	979	98.0		
Total		999	100.0		

(Source: SPSS)

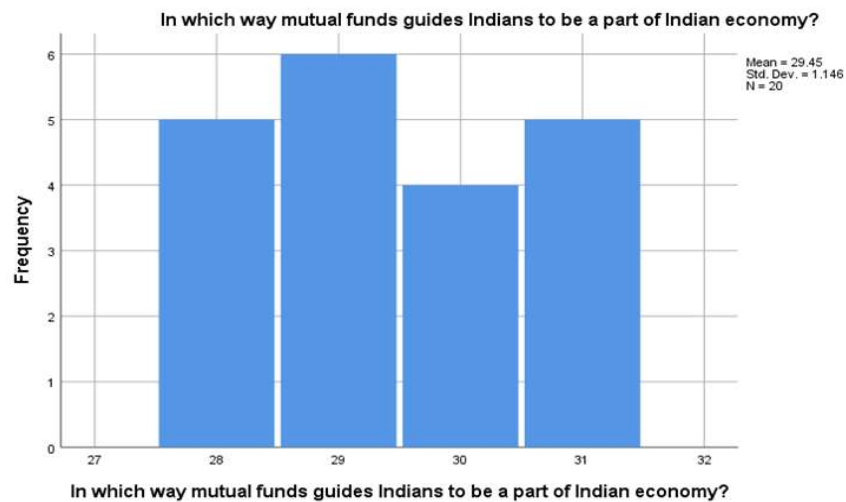


Figure 11: Histogram for question 8

(Source: SPSS)

Table 8 and Figure 11 also support the guidance of the mutual funds for and upliftment of India's economic conditions. Systematic Investment Plans (SIPs) allow users to save and invest a default amount regularly (ZeeBiz, 2023). Many AMCs push policies for managing mutual funds; like that of SBIMF, Axis MF, and ICICI Pru MF (Groww, 2023).

In which way does Indian finance steer common people for financial nudges?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	32	11	1.1	55.0	55.0
	33	9	.9	45.0	100.0
	Total	20	2.0	100.0	
Missing	System	979	98.0		
Total		999	100.0		

Table 9: Frequency table for question 9

(Source: SPSS)

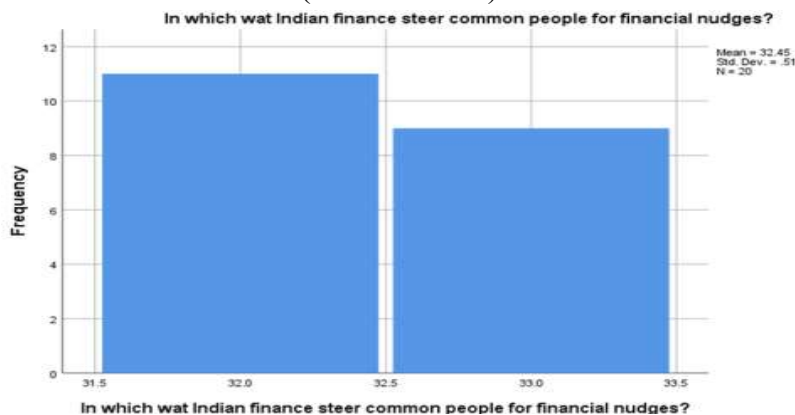


Figure 12: Histogram for question 9

(Source: SPSS)

In this question, the highest opted opinion is that “Through Sovereign Gold Bonds common people are welcome to invest in gold and track its price”. This indicates that gold bonds are more effective than the others; the standard deviation value for this question is 0.51, which ranges from (-2) to (+2), and is acceptable. Through Sovereign Gold Bonds common people are welcome to invest in gold and track its price. The nominal value in this scheme is almost ₹6000 per gram; this is available with nominal facilities and an online management system (Kulkarni, 2023). All the Indian banks support this system; again, the Indian government influences citizens to voluntarily give up LPG subsidies to pass those for more needy people. The Press Information Bureau mentioned that almost 1.04 crore Indian LPG consumers participated in the “GiveItUp” campaign and supported the Indian economy for economically weaker sections (PIB, 2023c).

What are the necessary things to maintain financial flow and activities effectively?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	34	4	.4	20.0	20.0
	35	5	.5	25.0	45.0
	36	6	.6	30.0	75.0
	37	5	.5	25.0	100.0
	Total	20	2.0	100.0	
Missing	System	979	98.0		
Total		999	100.0		

Table 10: Frequency table for question 10

(Source: SPSS)

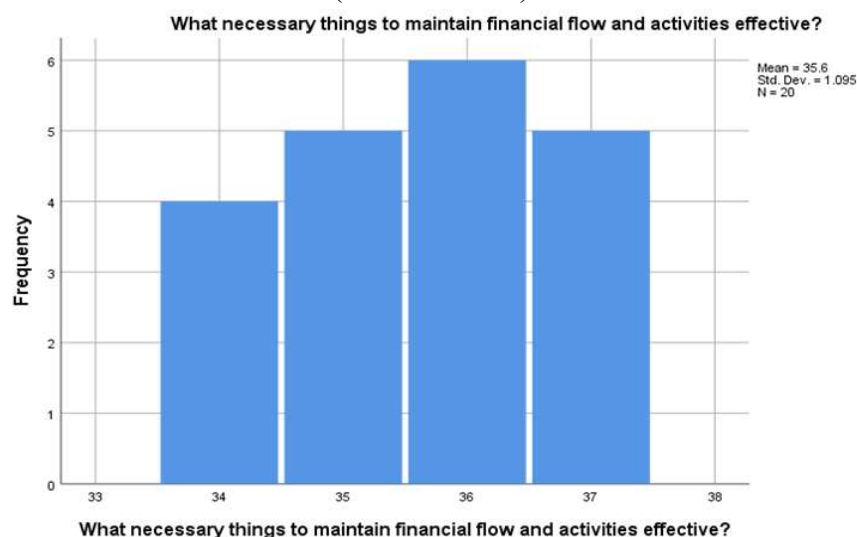


Figure 13: Histogram for question 10

(Source: SPSS)

The third option for this question “Financial literacy programs should be conducted in rural areas” is opted for the highest time. Hence, it can be said that financial literacy among rural people is very necessary to promote the Indian economy based on the current situation. Transparency and consistency should be present in all banking procedures, especially in debt-related activities (Rivetti, 2021). Personal information should be secured in digital financial accounts. Financial literacy programs should be conducted in rural areas; it will introduce the common people to new changes in financial schemes, as well as fintech policies (Lusardi, 2019). Investment facilities need to be with a lower amount for poor and rural people.

Descriptive Statistics

	Mean	Std. Deviation	N
In which way business persons were getting facilities from nudging accounts	13.50	1.192	20
In which post are you working?	2.00	.795	20
What is your working experience?	4.90	.788	20
In which way senior citizen behaviour is nudged in the financial service domain?	7.75	.716	20
Which educational nudges so highly support Indian financial literacy?	17.95	.826	20
In which way Indian financial sectors digitally nudge common people?	21.35	.933	20
In which Indian banks allows common people to be a part of Indian financial progress?	25.35	1.040	20
In which way mutual funds guides Indians to be a part of Indian economy?	29.45	1.146	20
In which way Indian finance steer common people for financial nudges?	32.45	.510	20
What necessary things to maintain financial flow and activities effective?	35.60	1.095	20

Figure 14: Descriptive statistics

(Source: SPSS)

The above figure highlights the values of standard deviation for each question; this clearly shows that standard deviation values are within (-2) and (+2). Thus, it can be said that the research process is valid and proves the null hypothesis in this study.

Correlations											
	In which way business persons were getting facilities from nudging accounts	In which post are you working?	What is your working experience?	In which way senior citizen behaviour is nudged in the financial	Which educational nudge is so highly supported in the financial service domain?	In which way Indian financial literacy?	In which Indian banks allow mutual funds to be a part of Indian financial progress?	In which way Indian financial nudge?	In which Indian financial nudge?	What necessary things to maintain financial and activities effective?	
Pearson Correlation	1.000	.944	.896	.832	.936	.922	.955	.982	.908	.927	
	In which way business persons were getting facilities from nudging accounts	.944	1.000	.924	.832	.963	.852	.892	.925	.778	
	In which post are you working?	.896	.924	1.000	.886	.963	.837	.880	.927	.772	
	What is your working experience?	.832	.832	.886	1.000	.868	.846	.901	.850	.756	
	In which way senior citizen behaviour is nudged in the financial										

Figure 14: Analysis through Pearson Correlation

(Source: SPSS)

Figure 14 highlights the value of Pearson correlation among the questions; all questions are interrelated and presented in a tabular format. The acceptable value of Pearson correlation is between (-1) and (+1); based on Figure 14, all the values are between 0 and (+1). Hence, can be said that all the interrelations among all the questions are valid.

Model Summary ^b							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	1.000 ^a	1.000	1.000	.000	1.000	.	9

Model Summary ^b			
Model	df2	Sig. F Change	Change Statistics
1	10	.	2.091

Figure 15: Model summary of total analysis

(Source: SPSS)

In a scientific study, the R-square value should be above 0.95 to prove the reliability of a study. Figure 15 presents that the R-square value of this study is 1.000, which is higher than the mentioned value. Hence, this also proves that the analysis process is valid and the economic nudges by the Indian financial sector are effective for India's economic development.

ANOVA^a

Model	Sum of	df	Mean Square	F	Sig.
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		Squares					
1	Regression	27.000	9	3.000	.	.	^b
	Residual	.000	10	.000			
	Total	27.000	19				

Table 11: ANOVA analysis

(Source: SPSS)

According to Yu et al., (2022), analysis of variance (ANOVA) is useful for mixed research method; as this study is conducted with quantitative analysis of qualitative data, ANOVA analysis method is proper for this research process. Again, the mean square value should be near 0 to be valid; when the mean square value is 0, this is the most perfect. The above table shows that the residual value is 0; hence, this is the most proper value. However, for regression mean value is 3, which is less acceptable than the residual value.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.983	.988	10

Table 12: Reliability statistics

(Source: SPSS)

The above table presents that “Cronbach's Alpha” score is 0.983; the reliable value of this unit is 0.70 or above. Hence, it can be said that this statistic is reliable or the statistical analysis is proper. According to Amirrudin et al., (2021), this value develops profound aspects to prove practical conceptual simulation to prove the reliability of valid data.

The findings of the research show that nudges have impacted the financial services landscape in the country and the mutual fund industry specifically. The financial services landscape has transformed with policy push like Demonetisation and Initiatives like Digital India and implicit nudge toward digital payment services.

The Indian government has actively employed the concept of nudging to steer citizen behaviour in the financial services domain. Here are some prominent nudges in form of schemes that have been used:

Jan Dhan Yojana: Launched to ensure financial inclusion with formal banking

Digital India Campaign: This campaign, promoting digital transactions and the use of nudged citizens towards a cashless (or less-cash) economy.

Voluntary LPG Subsidy Relinquishment: This campaign encouraged citizens to voluntarily give up their LPG subsidies so that they could be passed on to more needy individuals.

Sovereign Gold Bonds (SGB): To deter physical gold purchases and nudge individuals towards a more formal investment route.

PM SVANidhi Scheme: Aimed at providing micro-credit facilities to street vendors, this scheme nudged them towards formal credit channels

Stand-up India Scheme: For encouraging entrepreneurship offering loans to women entrepreneurs and Scheduled Caste (SC)/Scheduled Tribe (ST) individuals, the government nudged these groups towards entrepreneurship and self-reliance.

Atal Pension Yojana: This scheme nudges the unorganized sector workers to voluntarily save for their retirement by providing a co-contribution from the government.

Promotion of UPI and BHIM: The Unified Payments Interface (UPI) and the BHIM (Bharat Interface for Money) application were promoted aggressively to nudge individuals and businesses towards digital transactions.

MUDRA Yojana: Offering micro-loans to small businesses and entrepreneurs, this scheme nudged the informal sector towards formal business practices and financial inclusion.

Inference to Mutual fund industry simplification nudges have helped the industry to expand. Many Asset Management Companies (AMCs) in India have opted for various strategies including policy Push By AMFI. The different types of nudges applied in financial services and assets management companies are as follows

Defaults:

Retirement Savings: The National Pension System (NPS) has leveraged the default option, wherein employees are automatically enrolled into certain savings plans, with an option to opt-out rather than opt-in. This has seen a boost in participation rates and currently 6.62 crore subscribers and 22% increase in the year 2022-23

Mutual Fund SIPs: Some mutual funds automatically set a default amount for Systematic Investment Plans (SIPs), prompting users to save regularly.

Simplification and Framing:

Simplified Documentation: Efforts have been made to reduce the complexity of documents associated with financial products. For instance, Know Your Customer (KYC) procedures have been simplified for certain investment thresholds.

Risk Framing: Mutual funds in India now come with a color-coded riskometer, visually presenting the risk associated with each fund.

Digital Nudges

Push Notifications: Banking and financial apps have started using timely push notifications to remind users of due dates for credit card bills, SIP dates, or to encourage investments during market lows.

Visual Tools: Visualization tools and simulators are used on digital platforms to show potential growth of investments over time, nudging users to invest or save more.

Peer Comparison & Social Proof

Most Popular Funds: Investment platforms often highlight "most popular funds" or "top investor choices," leveraging the power of social proof to guide investment behaviours.

Testimonials : To build confidence ,some of thefintech applications and portal carry the endorsements of its customers who have gained by investing in the products.

Rewards

Topromote digital payments & transactions , many platforms offer cash back and reward points . These incentive have reduced cash transactions and promoted digital payments

Referral Programs :Most fintech platforms provide special discounts for referring friends and familyto increase distribution and add new customers . They also use social influencer with large distribution on social media for promoting digital transactions

Education Nudge

Financial Literacy :As per policy directive and to increase customer base , banks and financial institutionhave introduced investor awareness and financial literacy programsthrough webinars and workshops. These sessions help in spreading awareness of products and services and helping investors make informed decisions.

Simulationand quizzes : To make financial knowledgeconcept more engagingand interactive , many platforms have interactive content likequizand financial goal simulation to simplify concepts and help them understand the usage .

Expert Views on the Indian Mutual Fund Industry

Industry experts which included Financial advisors , Fund managersand officials from regulators officewere interviewedto understand how nudges have been useful .Some of strategies suggested by the experts are as follows

Digital Platforms:RBI's data indicate that the digital transactions that there has been a multifold increase in digital transaction with around 30 crore UPI users and 20 crore BHIM pay users. Since these customers are on the digital portal, Mutual fund companies should use the base to expand its distribution.

Gamification: These customers already on portals can be engaged by gamified investment journeys with special rewards and incentives for achieving milestones or answering quizzes on mutual funds

Defaults

Automatic Enrollment:The new to bank customers can be auto enrolled for systematic Investment plans (SIPs)to encourage investmentswith an opt out feature . However, the information may be shared with account details.

Pre-selected Options:The financial platforms may have recommended diversified funds as per the risk appetite to nudge new investors to invest and make the decision-making process simpler.

Simplification of Process

Simplified Documentation: The investment process for mutual funds can be further simplified and streamlined by reducing paperwork and providing information in simple language.

Goal-based Investment Visualization: Nudging investors to plan their investments by linking it to specific goals(buying home , education , retirementetc) can make the whole process more relatable and visually appealing

Transparency & Testimonials

Transparency: More regularly published information and updated will lead to better transparency regarding fund performances, charges, and risks.

Testimonials: Posting stories of common individuals who have benefited from mutual funds can make investment seem more useful and relatable.

Popular Choices: Showcasing the most popular funds among peers or those in the same income group or age bracket can encourage new investors to take the plunge.

Rewards and Incentives
First-time Investor Incentives: Offering reduced fees or other incentives for first-time mutual fund investors can help attract new investors.

Loyalty points: Rewarding long-term investors with reduced transaction charges can encourage sustained and further investments.

Tax benefits

Reintroducing benefits on long term capital gain for equity investments and enhancing tax benefits linked to tax saving funds can be an effective nudge for potential investors.

Literacy Nudges:

Localized Financial Literacy Campaigns: Customised campaigns for women , low income groups , small businesses in regional languages, focusing on the benefits of mutual fund investments can help expand reach.

Interactive Tools: Interactive tools and content which aid users to understand mutual fund concepts, like compounding, through interactive infographics ,booklets& quizzes,

Workshops & Webinars: Collaborating with social influencers , local public figures or financial experts to endorse and share their personal experience can build confidence for general public .

Partnering with them conduct interactive sessions about mutual fund investments can also encourage people to invest in mutual funds

Feedback Mechanisms:

Periodic Investment Health Checks: Providing investors with a, quarterly, half yearly or annual review of their mutual fund investment portfolios, doing industry and peer comparisons and recommending any changes in funds will help build investor confidence

Notifications: Timely reminders for SIP dates, market downturns as opportunities to invest, or celebrating investment anniversaries can encourage sustained investing.

Tailored Products

Customized Funds for Target Groups: Launching mutual funds tailored to specific segments like young professionals, women, or retirees can help in attracting these groups.

Implications of the study

The implications of the Research paper that nudges in financial services have led to Investor Empowerment. With India's diverse investor base, nudges can significantly enhance financial literacy and empowerment. It has also helped Industry refinement for the Mutual Fund Industry and broader financial services. Understanding the efficacy of nudges can aid in crafting more investor-centric products and communication strategies. In terms of regulatory framework .The research underscores the need for a comprehensive framework to ensure that nudges, while influential, remain transparent and unbiased. Regulatory bodies could benefit from crafting guidelines that help in the ethical employment of nudges. The Nudge Theory can also be used to achieve sustainable goals in the context of mutual funds by steering investor behaviour towards sustainable investing without restricting their freedom of choice. The investors can be incentivised and educated with information on societal impact of ESG funds and can nudge them towards considering the broader implications of their investments

Conclusion

In conclusion , the landscape of Indian Financial services , has seen a transformative change due to technology and policy reforms is all set to achieve new milestones of economic success. The financial nudges integrated with policy framework have slowly but definitively started to shape the investor choices and behaviour. The mutual fund industry has potential in reaching new investor base who can participate and catalyse the nation's growing economy . As India strives to achieve USD 5 Trillion economy , the deployment of strategic nudges can effectively help achieve it . It can help expand the investor base , deepen penetration across the Tier 2 & Tier 3 cities of the country . This will increase financial inclusion and help every investor make informed investment decision for financial wellbeing.

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