Educational Administration: Theory and Practice
2024, 30(5), 11591- 11595
ISSN: 2148-2403
https://kuey.net/
Research Article

Existence of mental accounting process in individuals' financial decisions – A study on behavioral finance based on vignettes with special reference to Palakkad District, Kerala

Seena. K.R[1*], Dr. G.R. Dinesh Kumar[2]

[1*]Research Scholar, Dept. of Commerce, AJK College of Arts and Science, Coimbatore.
[2]Asst. Professor & Vice Principal, AJK College of Arts and Science, Coimbatore.

Citation: Seena. K.R, Dr. G.R. Dinesh Kumar et al. (2024 Existence of mental accounting process in individuals' financial decisions – A study on behavioral finance based on vignettes with special reference to Palakkad District, Kerala *Educational Administration: Theory and Practice*, *30*(5), 11591- 11595
Doi: 10.53555/kuey.v30i5.4978

ARTICLEINO

ABSTRACT

All money is fungible or interchangeable is the assumption of traditional economic theory but in behavioral finance, people attributing different values to the same sum of money based on its origin. This psychological concept is known as mental accounting. The study uses vignettes (short illustrative story) as s methodological approach to understand the existence of mental accounting process in individuals' financial decisions. Through the segregation and integration people may compartmentalize their losses and gains. The results of the study show there is existing mental accounting process in individuals' financial decisions. This concept operates through the framing of financial outcomes, assigning funds to separate mental accounts and also the evaluation of transactions. Mental accounting principles create environments which promote the policy makers can craft interventions and it helps individuals to make rational financial decisions. Marketers can design promotions which are in line with consumers' mental accounting concepts all this lead overall economic well-being. Mental accounting extended its implications to numerous areas such as personal finance, economic theories, public policies etc.

Key Words: Mental accounting, Vignette, Behavioral finance and Financial risk.

INTRODUCTION

The study on the presence of mental accounting enhances the understanding of the psychology of choice in individuals' financial decision making. In the process of decision making, behavioral finance provides a complete model of human behavior because it merges the traditional finance theory with cognitive psychology (Thaler, 2005). Absence of thinking the value of money in absolute terms is the root cause of mental accounting process. It leads to make irrational money decisions. Because of subjective criteria people placing different values on same amount of money. And they ignore the concept of fungibility its result may detrimental. Richard H. Thaler a professor of Economics at the university of Chicago's Booth School of Business introduced the concept of mental accounting in the paper titled "The Mental Accounting Matters" in 1999. And it defines a set of cognitive operations lead people to make irrational spending and investment decisions because they do not consider the fungibility of money and they do not admit the fact that to treat all money the same regardless of its origin and intended use.
The research determines the concept of mental accounting and the existence of mental accounting process in individuals with the help of vignettes. Mental accounting suggests that individuals give value to money differently. They consider its source, intended use, or other cognitive categories. Thaler (1999) mental accounting rules are not neutral therefore, a proper understanding of mental accounting processes help to understand the choices of individuals and this perceived attractiveness of choices can affect the accounting decisions such as to which category to assign purchase whether to combine an outcome with others and how often to balance the books. All these are the results of 'mental accounting violates the economic notion of fungibility'.

The concept of mental account is formed when an individual intended to start savings and reduce their expenditure, it explains individual economic behavior and it benefits the investors to control themselves (Statman, 1999). Understanding mental accounting can aid individuals to make better financial strategies and rational decisions. Consolidating various accounts help to avoid suboptimal choices on mental partitions. Individuals allocate their resources differently based on perceived categories or mental compartments therefore, the vignette studies often reveal the existence of mental accounting process in their decision making. In various scenarios how individuals frame financial decisions and manage their resources can be identified with help of vignette studies. It brings an insight on cognitive biases and behaviors in financial decision-making context.

LITERATURE REVIEW

Arora and Sisodia (2023) suggest that individuals' mental accounting process inducing the integration of losses and gains also, segregating small losses from higher gains which occur at same time. Individuals with different education levels and income levels can bring a significant influence on mental accounting system. And their study concludes that individuals believe in expanding their assets because they are expecting future income moreover, current assets and future income are significant factors of mental accounting.

Mahapatra and Mishra (2020) their study suggests individuals' cognitive, psychological and behavioral limitations influencing their financial decision-making process. And they found mental accounting system is one of the components of cognitive error and its presence influencing the households' financial decisions. Based on different expenditures and incomes, they used four concepts- current income, current assets, future income and mental budgeting which explain the concept of cognitive segregation of money.

Prosad et al., (2015) behavioral biases have very wide implications because a good knowledge of biases will equip the practioners to recognise others' mistkes as well as their own mistakes. It facilitates the financial advisors to understand their clients' psychology effectively and also, help to develop behaviorally modified portfolio as per their clients' predisposition.The investment bankers can understand the market sentiments likewise the financial strategist can do better forecasting and security analysis for recommanding stocks.Moreover, the individual investors can make sensible and effective financial decisions. The study concludes that the herding and status quo biases have equal importance along with heuristic and frame dependent biases.

Peon and Antelo (2021) their study brings an extensive insight on cognitive biases and their influence on fianncial decisions and they set three categories of behavioral biases include, heuristics biases, choices (framing and preferences) and social factors from these, representativeness, over confidence, prospect theory and social contagion are the most recurrent biases.

Calzadilla et al., (2021) they found while making financial models give adequate consideration to ordinary peoples' behavioarl finance biases and it shows some variables need revision particularly with respect to gender and cultural differences in geographies.

OBJECTIVES OF THE STUDY

The main aim of the study is to explore the existence of mental accounting process in indiviuals' financial decisions.

- To understand the concept of mental accounting
- To understand the individuals' perception on gains and losses by the use of vignettes.

MENTAL ACCOUNTING CONCEPT

Mental accounting refers to- the individuals and households use a set of cognitive operations for organizing, evaluating and keeping track of financial activities (Thaler, 1999). Enhance our understanding of the psychology of choice is the prime purpose of the study of mental accounting and the most attention received three components of mental accounting are: First, how the outcomes are perceived and practiced , on what basis decisions are made and evaluated by the indivdiuals. Second, assigning activities to specific accounts then, based on real and mental accounting systems the sources and uses of funds are labelled. Third, concern about the frequency of evaluating the accounts. It can balance as daily, weekly and so on also, can define narrowly or boradly (Thaler, 1999).

METHODOLOGY

The study conducted in three municipalities of Palakkad District of Kerala , earning members of the family are considered as the population for describing the individuals' perception on gain and loss. And following purposive sampling method. The respondents include government employees, private employees , self employed and business personnel. Both online and offline sampling is used to collect data . Vignettes are created with the help of google form and it has been circulated among the respondents of three muncipalities.

A total of 96 samples were collected and some invalid samples were eliminated. Therfore, total 90 samples were considered for analysis.
A series of satements in the form of vignettes are used for understanding the existence of mental accounting process in individuals' financial decisions. Vignettes are the hypothetical scenarios useful for collecting information where the available resources are minimum and these analysis are widely used in medical-psychology , social science (Bachmann et al., 2008; Wilson & While, 1998; Schoenberg & Ravdal, 2000 ; jenson et al., 2019) and finding solutions to other complex issues.
Present study uses vignettes to determine the perception of an individual and four scenarios were used to determine the existence of mental accounting. The scenarios were presented as small paragraph and it describes the situation with pairs of outcomes either segregated or integrated and the respondents were asked to prefer their frame. In each situation , Mr. A and Mr. B are considered as separate person . And in each cases to find out , if two events happen in Mr. A's life and one event occurs in Mr. B's life , who would be more happier or who would be more upset ? Mr. A or Mr. B ?. If the two scenarios are emotionally equivalent there is 'no difference' because in all the cases financial gain or loss is equivalent. Past literatures were considered for preparing four vignettes : segregation of gains , integration of losses, integration of a small losse with a larger gain, segregation of a small gain (silver linings) from a larger loss (Thaler 1985 , 1999).
90 respondents' valid preferences are taken from each scenario given to them by using the rate of recurrence for evaluating the concept of mental accounting. A brief explanation for each vignette is given through below section.

1. Segregation of Gains

This principle indicates that people preferring to receive separately multiple smaller gains than a single larger gain because from these multiple positive events they feel more happiness. Below given vignette was created and respondents were asked to specify their views to evaluate the same.

Statement of Scenario - 1	
Mr. 'A' received two birthday gifts one, worth Rs. 1000/- and another worth Rs. 500/- Mr. 'B' received a birthday gift of Rs. 1,500/- . Who was more happier?	
Mr.A	62.22% (56 respondents)
Mr.B	20% (18 respondents)
No Difference	17.78% (16 respondents)

The result concludes that most of the respondents (62.22%) agree that Mr A was to be more happier than B. Even if in both the scenario, the worth of gifts are same but Mr. A is more happier because the pleasure from each separate gift is more than the single combined gifts. The result supports the same that the mental accounting induce segregation of gains and can experience more happiness from multiple positive events.

2. Integration of Losses

As per this principle people, prefer to reduce the pain of each individual loss so that they want to integrate the losses occur in same time frame (same day or same week) in to a single larger loss rather than facing multiple smaller losses. Below given vignette was created and respondents were asked to specify their views to evaluate the same.

Statement of Scenario - 2	
Mr. A received a letter from the Department of tax and saying that he made an error during his tax filing and owed of Rs. 1500. The same day, he received similar letter from an insurance company saying that he made a mistake in payment and he owed Rs. 1000. There were no other repercussions from these mistakes. Mr. B received a letter from the Department of tax and saying that he made an error during his tax filing and owed Rs. 2500. There were no other repercussions from this mistake. who was more upset?	
Mr.A	72.22% (65 respondents)
Mr. B	18.88% (17 respondents)
No Difference	8.90% (8 respondents)

The result has shown that most of the respondents (72.22%) agree that Mr. A was to be more upset than B . The total amount of bills of the first scenario is same with the bill of the second scenario that is the total loss is same although Mr. A is more upset because, experiencing the loss twice is more distressing than facing it once.Compare to actual money value of the bills the frequency of pain has an important role so, integrate multiple small losses in to a single larger loss reduces the pain of individual loss. The result shows the presence of mental accounting among individuals and it is against the rational economics.

3. Integration of a Small Loss with a Larger Gain

As per this scenario, people preferring to combine a small loss with a larger gain because they offsetting the pain of loss with the pleasure of larger gain. This principle is assessed in study by creating a scenario given below.

Statement of Scenario - 3	
Mr. A earns Rs. 10,000/- in one investment but loses Rs. 2,000/- on another. Mr. B earns Rs. 8,000/- on his investment Who was more happier?	
Mr.A	43.33% (39 respondents)
Mr.B	50.00% (45 respondents)
No Difference	6.67% (6 respondents)

By integrating a smaller loss with a larger gain, people feel better on a net gain of Rs. 8,000/- rather than focusing gain and loss separately. The gain of Rs. 10,000/- reduces the pain of Rs. 2,000/- loss. Even if the first situation, reduces the psychological pain associated with the loss, for the study the respondents prefer Mr. 'B' that he was to be more happier because they may think in second situation, there is not happened any loss to cancel against larger gain.

4. Segregation of a Small Gain from a Larger loss

As per this principle, despite the overall negative outcome to experience some positive feel, people prefer to separate or segregate a smaller gain from a larger loss. For evaluating the same the given scenario was created.

Satement of Scenario-4	
Mr A's car was damaged , he had to spent Rs. 5,000/- to repair damage . The same day the car was damaged, he got a cash bonus of Rs. 2000/- . Mr. B's car was damaged , he had to spent Rs. 3,000/- to repair the damage .who was more upset?	
Mr.A	34.44% (31 respondents)
Mr.B	57.78% (52 respondents)
No Difference	7.78% (7 respondents)

Mr. A and Mr. B had to spent same amount to repair damage but Mr. A's bonus money considered as a separate pleasant event and this positive experience gives consolation.Therefore, Mr. B was to be more upset because, from a larger loss people prefer to enjoy a small gain independently. The result supports the same that the mental accounting induce segregation of a small gain from a larger loss.

CONCLUSION

How individuals categorize, perceive and manage their money is analysed through above scenarios and most of the results are commensurate with the study of Thaler's Mental Accounting and Consumer Choice in 1985 . For the study four scenarios were formed based on segregation and integration of losses and gains.These scenarios bring valuable insights in to human behavior and illustrate how mental accounting influences decision making on financial events. The first situation, segregation of gains reveal to enjoy separately multiple smaller wins. Second situation, integration of losses emphasize to combine the losses to experience pain of loss once so that it reduces the pain of individual loss. In third situation, integration of small loss with larger gain tells combine the small loss with larger gain reducing the pain of small loss and in fourth situation, segregation of small gain from larger loss emphasizes if people have any small gain they want to enjoy it independently from a larger loss. Most of the study results emphasizes Thaler's principles and the way financial outcomes are framed refelct how people tend to derive more happiness or better satisfied and feel less distressed. Self control is the base of individuals' financial planning decisions (Mahapatra & Mishra, 2020) . The study results can use to improve the decision making, enhance well-being and can be applied in marketing where the marketers can design promotions, predict businesses and also influence consumer spending. And in personal finance mental accounting helps individuals to set aside fund for specfic goals. The policy makers can make interventions and incentives in line with mental accounting concepts. And in investment management, it helps to understand investors' preference.

Limitations and future guidelines

The findings based on vignettes may not be universally applicable across different cultures , demographic and socioeconomic statuses. The study uses earning individuals as the samples which may not represent the entire population. And there are chances of variability in responses that are not the causes of difference in mental accounting principles but some participants might differently interpreting the vignettes.The future research can be extended to cross-cultural and longitudinal studies gives insights on how cultural differences and behavioral changes over time influence mental accounting principles. Also, the study can be extended in another direction on emotional awareness, self regulation , personal goals ,managing cash flow etc. bring more awareness on emotional intelligence.

REFERENCES

1. David Peon and Manel Antelo (2021). The effect of behavioral biases on financial decisions. *Revista Estrategia Organizacional, Vol.10 no. 2, pp.1-63,ISSN 2339-3866 , https://doi.org/10.22490/25392786.4963,DOI:10.22490/25392786.4963*.
2. Dr. Sonam Arora and Dr. Diksha Sisodia (2023). An Empirical Study on Influence of Demographic Variables on Mental Accounting Process in Indian Households. *SEYBOLD Report, Vol.18, Issue-11,https://seyboldreport.net/DOI: 10.5281/zenodo.10148761* , PP. 80-93.
3. Calzadilla, J.F.,Bordonado-Bermejo, M.J., & González-Rodrigo, E. (2021). A systematic review of ordinary people, behavioural financial biases. *Economic Research,VOL. 34, NO. 1, pp. 2767–2789, DOI: 10.1080/1331677X.2020.1839526,https://doi.org/10.1080/1331677X.2020.1839526*.
4. Prosad,J.M., Kapoor, S., & Sengupta,J. (2015). Theory of Behavioral Finance. In T. Zeynep CopurHacettepe University, *Handbook of Research on Behavioral Finance and Investment Strategies: Decision Making in the Financial Industry (pp.1-24),DOI:10.4018/978-1-4666-7484-4.ch001.* United States of America by Business Science Reference (an imprint of IGI Global), IGI Global book series Advances in Finance, Accounting, and Economics (AFAE) (ISSN: 2327-5677; eISSN: 2327-5685).
5. Mahapatra, M.S., & Mishra, R. (2020). Behavioral influence and financial decision of individuals: A study on mental accounting process among Indian households. *Cogent Economics & Finance, 8:1, 1827762, DOI:10.1080/23322039.2020.1827762*.
6. Bachmann, L. M., Mühleisen, A., Bock, A., Ter Riet, G.,Held, U., & Kessels, A. G. . (2008). Vignette studies of medical choice and judgement to study caregivers' medical decision behaviour: Systematic review. BMC Medical Research Methodology, 8(1), 50.https://doi.org/10.1186/1471-2288-8-50.
7. Schoenberg, N. E., & Ravdal, H. (2000). Using vignettes in awareness and attitudinal research. International Journal of Social Research Methodology, 3(1), 63–74. https://doi.org/10.1080/136455700294932.
8. Wilson, J., & While, A. E. (1998). Methodological issues surrounding the use of vignettes in qualitative research. Journal of Interprofessional Care, 12(1), 79–86. https://doi.org/10.3109/13561829809014090.
9. Jensen, E. J., Stum, M., & Jackson, M. (2019). What makes inheritance fair in stepfamilies? Examining perceptions and complexities. Journal of Divorce & Remarriage, 60(3), 234–252. https://doi.org/10.1080/10502556.2018.1488123.
10. Mahapatra, M. S. (2020). Role of self-control and money attitude in personal financial planning, The Indian Economic Journal,0019466220933408. https://doi.org/10.1177/ https://doi.org/10.1177/0019466220933408.
11. Statman, M. (1999). Behaviorial finance: Past battles and future engagements. Financial Analysts Journal, 55 (6), 18–27. https://doi.org/10.2469/faj.v55.n6.2311.
12. Thaler, R. (1985). Mental accounting and consumer choice. Marketing Science, 4(3), 199–214, https://doi.org/10.1287/mksc.4.3.199.
13. Thaler, R. H. (1999). Mental accounting matters. Journal of Behavioral Decision Making, 12(3), 183.3. https://doi.org/10.1002/(SICI)1099-100771(199909)12:3-3C183::AID%10BDM318%3E3.0.CO;2%10F.
14. Thaler, R. H. (Ed.) (2005) . Advances in behavioral finance (Vol. 2). Princeton University Press.
15. Chandra, P. (2016). *Behavioural Finance, pp. 9.22-9.24.* New Delhi: McGraw Hill Education (India) Private Limited.
16. https://corporatefinanceinstitute.com/resources/management/mental-accounting/
17. Mental Accounting - Reference Guide - The Decision Lab - The Decision Lab
18. Mental Accounting (managementstudyguide.com)