

PAPER ID: 20260201041

Exploring Spending Patterns among Youth using a Mental Accounting Approach

Vinita Singh¹ & Parveen Chauhan²¹Research Scholar, Department of Management and Commerce, Jagannath University, Delhi NCR, Bahadurgarh²Professor, Department of Management and Commerce, Jagannath University, Delhi NCR, Bahadurgarh

Abstract: Mental Accounting, a concept of behavioural finance, was first introduced by Richard Thaler. The concept explains how individuals categorise, perceive, and manage their finances in non-rational ways. This study explores the expenditure behaviour among youths through the lens of mental accounting principles. The research aims to examine how young individuals mentally allocate their income and spending into different “mental” accounts, and how this influences their financial decision-making. Using a structured questionnaire distributed among university students and young professionals, the study collects data on income sources, spending patterns, and attitudes towards different types of expenses. The analysis investigates the role of factors such as income type (earned vs. gifted), spending purpose (necessities vs. wants), and psychological framing in influencing expenditure choices. Preliminary findings suggest that the youth often treat money differently depending on its source and intended use, confirming key predictions of mental accounting theory. These insights can help in designing more effective financial education programs and policies targeting youth’s spending and saving behaviour.

Keywords: Mental Accounting, Financial Decision-Making, Spending Behaviour, behavioural finance, cognitive biases

Introduction

Traditional finance theory is based on the principles that individuals make unbiased judgements and take rational decisions that maximise their self-interests. In contrast to this theory, behavioural finance theory explains that individuals’ tend to have psychological and emotional biases that lead to irrational decisions which results in sub-optimal outcomes. It merges the concepts of traditional finance theory with the personalities of individual behaviour (Raut et al. 2024). Behavioural finance does not surpass the existence of any finance theory, but to provide a conclusive framework of understanding the decision-making of individuals’ it merges the theoretical concepts with the cognitive psychology of individual (Thaler 2005). Understanding mental accounting is crucial for comprehending consumer spending behaviour, as it reveals how psychological factors shape financial decisions.

Mental Accounting, a behavioural finance concept describes the mental processes individuals use to categorise, track and evaluate funds based on its intended use, violating the classical assumption of fungibility (Thaler 1999). This cognitive framework influences consumer behaviour significantly- as people treats windfall gains more liberally than earned income, or perceive spending from different “mental accounts” very differently in terms of loss and utility. Recent studies have expanded on Thaler’s foundational work, exploring how mental accounting affects various aspects of consumer behaviour. (Darwin, 2024) conducted a systematic literature review and highlighted that individuals often treat money differently depending on its source or intended use, leading to inconsistent

spending patterns. Another significant area of research is the impact of mental accounting on overspending and financial instability. (Faizal et al. 2025) examined how mental accounting helps control overspending, particularly among Muslim consumers. The study found that grouping financial activities into different mental accounts could serve as a self-control mechanism, reducing the likelihood of overspending and financial stability.

Over the past few decades, mental accounting has emerged as a powerful lens to analyse spending patterns and financial behaviour more broadly. (Gelman and Roussanov, 2023) demonstrated that consumers treat funds from new credit lines or windfall gains as separate mental accounts, which often leads to increased discretionary spending. Their study highlights how the mere creation of a new credit card or receipt of unexpected money reduces the psychological pain associated with spending. (Lee and Morewedge, 2023) explored how consumers handle product returns, they discovered that consumers are more willing to spend money refunded from product returns than unspent money, even when the refunded amount is equivalent. This behaviour suggests that the psychological categorisation of money influences spending decisions, with refunded money being perceived as less “real” or less painful to part with. Despite the notion that money is fungible, mental accounting demonstrates that how subjective labelling and segmentation, for example savings for future vs. daily expenses, greatly influence the expenditure behaviour and investment decision-making (Soman and Ahn 2011). The theory also integrates insights from prospect theory and transactional utility, explaining phenomena

such as the “pain of paying”, where spending from a smaller account or using certain payment methods like cash vs. credit feels more painful, thereby influencing behaviour.

The main purpose of this research is to investigate the role of mental accounting principles among students and young professionals. The structure of the paper is divided into different sections: Section 2 discusses a brief literature review of studies related to mental accounting; Section 3 describes the methodology, including sampling, data collection and questionnaire design; Section 4 presents a brief analysis of the collected data. Section 5 presents the conclusions and discussions; Section 6 shares the limitations and future scope of the study.

Literature Review

Understanding the spending patterns of youth has long been a critical focus in behavioural finance and consumer psychology. Spending behaviours among youth are shaped not just by economic constraints but by the mental frameworks they use to categorise and evaluate money (Thaler 1985). Students with higher mental accounting awareness categorise spending better and exercise greater control, self-control also significantly reduces daily expense level (Ahista and Fikri 2024). This is also supported from the study (Rifani et al. 2024) conducted on students in Parepare City, the findings discovered that self-control and mental accounting behaviour have positive impact on students for managing their daily expenses. There is a positive correlation among mental accounting awareness and consciousness of daily spending patterns among students. For youth, who are at a formative stage of financial decision-making, mental accounting mechanisms may significantly affect their spending habits (Xiao and Porto, 2017).

While mental accounting has been extensively studied among adults, research focusing on how young people develop and utilise such frameworks in their spending is comparatively limited. A study by (Webley and Plaisier 1998) discovered that while younger children aged 5-12 years lacked clear mental categorisation of money, children aged 11-12 years began to demonstrate patterns of decision-making similar to adults. Complimenting this, a longitudinal study of adolescents aged 12-15 years revealed that those whose parents had higher educational attainment and who had savings in their name were more likely to adopt mental accounting and maintain personal savings (Friedline et al. 2012).

Beyond early adolescence, mental accounting continues to influence expenditure among youth. (Cheng et al. 2023) Conducted an online experimental study on two distinct datasets- the student dataset and the adult dataset. The study revealed that consumers display different spending behaviour depending on how they mentally label received funds. Windfall gains tend to

spur hedonic spending, whereas hard-earned income is more likely dedicated towards utilitarian uses. Notably, having a scarcity mindset moderates this tendency- students high in perceived scarcity are less inclined to spend windfall gains on indulgences compared to those without such a mindset.

Gender differences in financial decision-making have been a subject of interest in recent research. In a study by (Wagner and Walstad, 2023) found that females in single households are less likely to engage in prudent financial behaviours compared to their male counterparts. This disparity highlights the necessity of considering gender specific approaches in financial education programs aimed at youth. Furthermore, (Singh and Nandan, 2024) explored how impulsivity relates to mental accounting in individual investors, noting that gender significantly moderates the relationship between impulsivity type and mental accounting. Their findings suggest that gender differences should be considered when designing financial tools and interventions.

A large scale study of 1,619 employed high school seniors in the US categorised spending behaviours into savers, necessity spenders, and discretionary spenders. The study findings revealed that savers tend to come from families that modelled savings and planning. Necessity spenders often hailed from financially constrained households. Discretionary spenders, who freely spent on non-essential items, were more likely to come from higher income families (Pritchard et al. 1989). A study by (Faizal et al. 2025) examined how Muslim youth utilise mental accounting to manage overspending, emphasising the importance of cognitive budgeting in financial stability. Their research suggests that mental accounting can be an effective tool in controlling impulsive spending behaviours.

The integration of mental accounting principles into the financial education program has shown promising results. A study by (Garg and Singh, 2023) developed an interactive digital prototype to assist students in managing their finances, incorporating mental accounting strategies. The results demonstrated significant improvements in user engagement and financial management, indicating the effectiveness of such approaches in enhancing financial literacy among youth. The advent of digital financial tools has introduced new dynamics in youth spending behaviour. Research by (Shah et al, 2024) investigated the impact of digital payments on overspending behaviours, finding that digital payment methods, when combined with digital financial literacy, can influence spending patterns. This study underscores the need for integrating mental accounting principles in digital financial education to promote responsible spending among youth.

In sum, existing literature underscores the significant role of mental accounting in shaping youth spending behaviour but reveals several gaps. The integration of mental accounting into

financial education, considering gender differences and the impact of digital tools, is essential for promoting responsible financial behaviours among young individuals. This study aims to address these gaps by exploring the relationship between mental accounting and spending behaviour, considering the indispensable role of gender. The findings are expected to contribute to a more nuanced understanding of youth financial behaviour.

Research Problem Statement

Young people today are making more financial decisions than ever before- whether it's spending on lifestyle, education, entertainment or online shopping. Despite having access to digital tools and financial knowledge online, many struggle with managing money wisely. One major reason for this is not just a lack of financial literacy, but also how they mentally organise and perceive their money- what behavioural economists call mental accounting. While traditional finance assumes people make logical decisions with their money, the reality, especially among youth, is quite different.

While there's been considerable research on mental accounting and on youth financial behaviour separately, very few studies connect the two. Most existing work either focuses on adult financial decisions or treats youth spending behaviour from a general psychological or economic perspective, without specifically examining the mental accounting frameworks young people use.

Furthermore, the rapid proliferation of digital financial tools and social media platforms has introduced new variables affecting youth spending behaviour. Digital wallets, instant credit, Buy Now, Pay Later (BNPL) services availability potentially interacts with mental accounting processes, altering traditional spending patterns (Morse et al. 2020). However, research integrating these modern financial contexts with mental accounting remains limited, representing a significant gap in current knowledge.

The study aims to fill the gap by exploring how youth think and divide their money mentally, offering new insights that could inform better financial education, policy, and tools tailored to their mindset.

Objectives of the study

The objectives of current study are to:

1. Examine whether there is a significant difference in the average level of control over monthly budgets between females and males.
2. Investigate the relationship between mental accounting and spending behaviour.

Hypotheses

H₁: There is a significant difference in the average level of control over monthly budgets between females and males.

H₂: There is no relationship between mental accounting and spending behaviour.

Research Methodology

The study employed a quantitative, cross-sectional research design to investigate the relationship between mental accounting and spending behaviour among youth, and to examine potential gender differences in spending patterns. The research was guided by principles of behavioural finance, particularly the concept of mental accounting, as introduced by (Thaler, 1999), to understand how cognitive categorisation of money influences spending decisions.

For this purpose, a structured questionnaire was adopted to measure two key constructs namely mental accounting and spending behaviour. The questionnaire was divided into three sections; the first section was to gather information on the demographics, the second section contained questions on assessing the mental accounting, this section measured the extent to which participants engaged in mental accounting behaviour such as budgeting, expense categorisation and mental tracking of money, and the third section was on examining the spending patterns and preferences of the youth, this section assessed the frequency and nature of participants' spending behaviour, including impulsive spending, planned purchases, and saving habits. For mental accounting, 5 items were adopted from Antonides et al. (2011) and Soman (2001). For spending behaviour, 5 items were taken from Sui et al. (2021).

If a panel of judges evaluates an instrument, it is said to have content validity (Sekaran 2000). To achieve content validity, the questionnaire was given to a panel of experienced researchers to evaluate whether the research instrument takes into consideration an acceptable and representative set of items that fully measure the concept of mental accounting and spending behaviour.

The convenience and snowball sampling technique was used for the survey. Participants were invited to complete the questionnaire online through Google Forms. Informed consent was obtained, and anonymity and confidentiality were maintained throughout the research process.

Data were analysed using Microsoft Excel. Descriptive Statistics were used to summarise demographic and key variable distributions. An independent samples t-test was conducted to determine if there was a statistically significant difference in spending behaviour between male and female participants. Pearson's correlation analysis was conducted to examine the relationship between mental accounting and spending behaviour.

Data Analysis and Results

Table 1: It provides detailed information on employment, education and income patterns across the demographics of the respondents. Out of 107 responses received, 36 (33.6%) were females and 71 (66.4%) were males.

Age Group Distribution: The age group 18-21 years was heavily male-dominated, with 40 respondents (32 males, 8 females), and all of them either unemployed or part-time employed students. In contrast, the 22-25 and 26-30 age groups were more evenly distributed across genders and were composed of full-time employed individuals.

Employment Status: The majority of the respondents (54.2%) were full-time employed, with a gender distribution of 26 females and 32 males. A significant proportion (37.4%) were students, unemployed, predominantly male (32 out of 40). The student, part time-employed category, accounted for only 8.4% of the sample with a male majority.

Educational Qualification: The majority of the respondents were either postgraduates (42) or undergraduates (47). Notably, postgraduates were evenly split across genders (21 each). Undergraduates were mostly male (39 out of 47). Ph.D. holders numbered 11, with females (7) outnumbering males (4).

Income Distribution: A substantial portion of the respondents (76 out of 107) reported earnings above Rs. 30000, with a relatively balanced gender distribution (29 females and 47 males). The lowest income group, Below Rs. 5000 comprised 27 respondents, mostly males (20 males, 7 females), and these were largely from the student-unemployed group. Notably, females are better represented in the middle-income bracket (Rs 20001- Rs 30000).

18-21	1	1	
Under Graduate	1	1	
Above 30000	1	1	
22-25	2	6	8
Post Graduate	2		2
Rs 10001- Rs 20000	2		2
Under Graduate	6		6
Above 30000	2		2
Rs 10001- Rs 20000	3		3
Rs 20001- Rs 30000	1		1
Student (Unemployed)	8	32	40
18-21	8	32	40
High School	4		4
Below Rs 5000	4		4
Under Graduate	8	28	36
Above 30000		3	3
Below Rs 5000	7	20	27
Rs 10001- Rs 20000	1		1
Rs 20001- Rs 30000	1		1
Rs 5001- Rs 10000	1	3	4
Grand Total	36	71	107

Table 1: Demographic Information

Row Labels	Female	Male	Grand Total
Full-time employed	26	32	58
22-25	8	8	16
Post Graduate	8	8	16
Above 30000	8	8	16
26-30	10	19	29
Post Graduate	10	14	24
Above 30000	5	14	19
Rs 20001- Rs 30000	5		5
Under Graduate		5	5
Above 30000		5	5
above 30	8	5	13
P.hD	7	4	11
Above 30000	7	4	11
Post Graduate	1	1	2
Above 30000	1	1	2
Student (Part-time employed)	2	7	9

The results given in Table 2 explain whether there is a statistically significant difference in the average level of control over the monthly budget between males and females. An independent t-test was applied to compare the mean spending behaviour scores of the two groups.

The results showed that the mean spending behaviour score for females was 2.69, while for males it was slightly lower at 2.64. The variances in spending behaviour were 1.05 for females and 1.57 for males, which indicates that male participants exhibit slightly more variability in their spending behaviour as compared to females. The variances indicate some degree of heterogeneity within each gender group, particularly among males, but this variability does not translate into a meaningful difference in average spending behaviour.

The t-test results provide a calculated t-statistic of 0.188 with 81 degrees of freedom. The associated two-tailed p-value was 0.852, which is substantially higher than the commonly used significance level of 0.05. The critical t-value for a two-tailed test at 5% level of significance is 1.9897. Additionally, the calculated t-statistic is much smaller than the critical t-value of

1.99, reinforcing the conclusion that there is no statistically significant difference between the two groups.

Since, the absolute value of t-statistic is far below the critical value, and the p-values is much greater than 0.05, there is sufficient evidence to reject the null hypothesis that the mean levels of control over monthly budgets are the same for females and males. The results do not provide evidence of a meaningful difference in budget control between genders in this sample. These findings suggest that, within this population, gender may not play a significant role in how individuals manage or control their monthly budgets.

The results suggest that, within the sample, gender does not play a significant role in influencing spending behaviour. Despite the mean score for females being slightly higher than for males, this difference is negligible and likely due to random variation rather than a true gender effect. These findings align with some recent research indicating that gender differences in financial behaviour may be less pronounced than traditionally assumed, especially when controlling for cognitive factors like financial literacy and mental accounting (Basalma, 2024). It implies that interventions aimed at improving spending behaviour among youth could focus more on psychological and behavioural factors rather than tailoring strategies based on gender alone.

	Females	Males
Mean	2.685714286	2.642857143
Variance	1.045378151	1.566252588
Observations	35	70
Hypothesized Mean Difference	0	
Df	81	
t Stat	0.187503434	
P(T<=t) one-tail	0.425867415	
t Critical one-tail	1.663883913	
P(T<=t) two-tail	0.851734829	
t Critical two-tail	1.989686323	

Table 2: T-test between two samples

The scatterplot in figure-1 illustrates the relationship between the average mental accounting score and the average spending behaviour score of all the respondents. The graph clearly reveals a positive correlation. As mental accounting scores increase, there is a corresponding increase in spending behaviour scores. This trend indicates that individuals who engage more actively in mental accounting tend to exhibit more structured or possibly more conscious spending behaviours. Conversely, those with

lower mental accounting scores might lack this structured approach, potentially resulting in more erratic or impulse spending.

The clustering and alignment of data points suggest a moderately strong linear relationship, as evidenced by the upward trajectory of the scatterplot. As the mental accounting score increases from lower values (around 2) to higher values (around 9), the spending behaviour score also tends to increase proportionally, ranging approximately from 3 to 14. While the points do not lie perfectly on a straight line, the clustering around a positively sloped trend line indicates low dispersion, reinforcing the strength of this association. This positive correlation aligns with the behavioural finance literature, which posits that mental accounting, the cognitive process of categorising and labelling money for specific uses, positively influences financial decision-making and spending patterns.

The scatter plot shows minimal deviation from the linear trend, with most data points closely following the expected pattern. This indicates low variability and suggests that mental accounting is a consistent predictor of spending behaviour in this sample. No significant outliers appear in the plot, which reinforces the reliability of the observed relationship. The absence of extreme deviations suggests that the connection between mental accounting and spending behaviour is stable across different levels of these variables.

This approximate linear relationship suggests that mental accounting, a psychological process where individuals mentally categorise and manage money, plays a vital role in determining how youth engage in spending. The data imply that as youth become more conscious in their mental accounting strategies, their spending behaviour becomes more predictable.

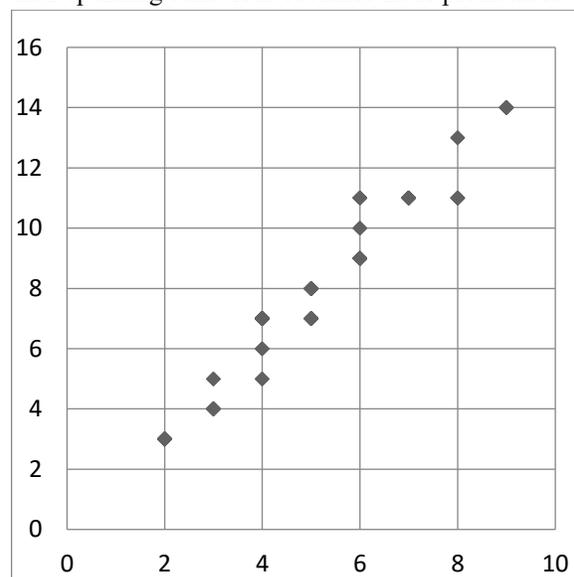


Figure 1: Graph reflecting the relationship between Mental Accounting and Spending Behaviour

The results given in table-3 present the correlation analysis between the average mental accounting score (MA Score) and the average spending behaviour score (SB Score). This relationship was examined to understand how cognitive budgeting influences youth spending patterns. The Pearson correlation coefficient ranges from -1 to +1, where values closer to +1 signify a strong positive relationship, values near -1 indicate a strong negative relationship, and values around zero denote no linear relationship. Here, the correlation coefficient between the two variables was found to be 0.98, indicating a very strong positive correlation. This statistically significant correlation suggests that individuals with higher mental accounting scores tend to demonstrate more structured and consistent spending behaviour.

The Figure 1 scatterplot visualising this relationship further supports this finding, showing a clear upward trend where an increase in mental accounting scores is closely related to an increase in spending behaviour scores. Considering the correlation value, we reject the null hypotheses stating that there is no correlation between mental accounting and spending behaviour.

The strength of this correlation aligns with previous research (Faizal et al., 2025, Singh and Nandan, 2024), which highlighted mental accounting as a significant determinant of financial behaviour. It emphasises mental accounting’s role as a psychological mechanism influencing how young people manage their finances and spending decisions.

This finding has practical implications for financial literacy programs and interventions aimed at youth. Educators and policymakers can leverage the principles of mental accounting to design targeted strategies that promote better spending habits. Moreover, digital financial tools could incorporate mental accounting features that simulate mental envelopes or categories, to support users in aligning their spending with their mental accounts. Given the high correlation, such tools could enhance users’ financial self-control and decision-making.

	MA Score	SB Score
MA Score	1	
SB Score	0.98025854	1

Table 3: Correlation analysis

Discussion and Conclusion:

This study explored the relationship between mental accounting and spending behaviour among youth, aiming to understand how cognitive budgeting influences financial decision-making. The

analysis revealed a very strong positive correlation (0.98) between mental accounting scores and spending behaviour scores, indicating that youth who actively engage in mental accounting tend to demonstrate more structured and consistent spending patterns.

To further examine whether spending behaviour differs significantly by gender, an independent samples t-test was conducted. The results indicated no statistically significant difference in spending behaviour scores between females and males. This suggests that gender does not significantly influence how engage in spending behaviour within the context of this study.

These findings underscore the importance of mental accounting as a psychological mechanism that helps young individuals categorise and manage their finances effectively. By mentally segmenting funds into different categories or accounts, youth are better able to control impulsive spending and allocate resources in a way that aligns with their financial goals. This cognitive process to play a critical role in shaping spending behaviours, beyond what traditional financial literacy alone can explain.

The practical implications of this research are significant. Financial education programs and interventions targeting youth should incorporate mental accounting principles, such as categorising expenses and budgeting techniques that mimic mental envelopes, to enhance financial discipline and promote healthier spending habits. Additionally, digital financial tools and apps designed for young consumers could integrate mental accounting frameworks to support better money management in everyday transactions.

Limitations of the Study

While this study provides valuable insights into the relationship between mental accounting and spending behaviour among youth, several limitations are acknowledged.

First, the study relies on self-reported data for both mental accounting and spending behaviour scores, which may be subject to social desirability bias. Participants might have overestimated or underestimated their financial behaviours, potentially affecting the validity of the results. Second, the sample size, although adequate for correlation and t-test analyses, may limit the generalizability of the findings to a broader youth population, especially across different regions or cultural contexts. The study’s sample composition, including the imbalance between male and female participants, could also influence the representativeness of gender comparisons.

Third, the cross-sectional design of the study captures a snapshot in time but does not allow for establishing causality between mental accounting and spending behaviour. Longitudinal or experimental designs would be necessary to confirm causal relationships and assess changes over time. Fourth, this study

focused primarily on the direct relationship between mental accounting and spending behaviour without incorporating other potentially influential variables such as financial literacy, personality traits or socio-economic factors. The exclusion of these factors may limit the depth of understanding regarding the complexity of youth financial decision making.

Lastly, the influence of rapidly changing financial technologies and digital platforms on mental accounting and spending behaviour was not explicitly examined. Giving the growing importance of digital financial services among youth, future research should consider these contextual factors to provide a more comprehensive picture. Acknowledging these limitations is essential for interpreting the findings cautiously and for guiding future research to build upon and address these gaps.

Future Scope of the Study

The study highlights the significant role of mental accounting in shaping youth spending behaviour and suggests that gender does not substantially influence spending patterns in this context. Building on these insights, several avenues for future research and practical applications are apparent.

First, future studies could explore how other demographic factors, such as socioeconomic status and cultural background, interact with mental accounting to influence spending behaviour. Understanding these dynamics could tailor financial educational programs more effectively for diverse youth populations.

Second, given the rapid evolution of digital financial tools and platforms, research could investigate how mental accounting principles are applied or challenged in digital environments. Like examining the impact of mobile banking, digital wallets and social media-driven consumption on the mental budgeting could provide valuable insights for designing user-centered financial products. Moreover, fintech applications targeting youth could incorporate mental accounting frameworks to help youth visualise and manage funds more effectively.

Third, longitudinal research tracking changes in mental accounting and spending behaviour over time would help clarify the causal relationships and the long-term effectiveness of interventions focused on cognitive budgeting strategies. Moreover, experimental studies testing specific mental accounting-based financial interventions, such as envelope budgeting or a categorised saving app can establish best practices for promoting sustainable financial habits among youth.

Finally, integrating psychological constructs such as impulsivity, self-control, and financial anxiety with mental accounting could deepen the understanding of the behavioural mechanisms driving spending choices.

Overall, future studies aimed at expanding the scope of mental accounting applications and their interactions with the emerging financial technologies and individual differences will be crucial

to developing innovative, evidence based strategies to enhance youth financial well-being.

References:

- Ahista, N., & Fikri, A. (2024). The Impact of Mental Accounting and Self-Control on the Daily Expenses of Students. *Formosa Journal of Multidisciplinary Research (FJMR)*, 3(6), 1893.
- Antonides, G., De Groot, I. M., & Van Raaij, W. F. (2011). Mental budgeting and the management of household finance. *Journal of Economic Psychology*, 32(4), 546-555. <https://doi.org/10.1016/j.joep.2011.04.001>
- Basalma, E. (2024). Exploring the Influence of Gender, Age, Education Level, and Income on Online Impulsive Purchasing Behavior among College Students. *Malaysian Journal of Business, Economics and Management*, 33-41.
- Cheng, L., Yu, Y., Wang, Y., & Zheng, L. (2023). Influences of mental accounting on consumption decisions: asymmetric effect of a scarcity mindset. *Frontiers in Psychology*, 14, 1162916.
- Darwin, K. (2024). Mental accounting in financial decision-making: A systematic literature review. *International Journal of Economics and Finance*, 12(3), 45-62. <https://jurnal.amertainstitute.com/index.php/IECON/article/view/127>
- Faizal, S. M., & colleagues. (2025). Mental accounting and overspending control among Muslim consumers. *Journal of Islamic Marketing*, 16(1), 89-105. <https://archive.aessweb.com/index.php/5002/article/view/5310>
- Faizal, S. M., Jaffar, N., & Muyop, N. A. (2025). Investigating spending behaviour using a mental accounting approach. *Asian Economic and Financial Review*, 15(2), 5310. <https://doi.org/10.55493/5002.v15i2.5310>.
- Garg, N., & Singh, S. (2023). Cognitive-based design to influence structured financial planning and money management for young people. In *HCI International 2023 – Late Breaking Papers* (pp. 41-48). Springer. https://doi.org/10.1007/978-3-031-48060-7_41.
- Gelman, M., & Roussanov, N. (2024). Managing mental accounts: Payment cards and consumption expenditures. *The Review of Financial Studies*, 37(8), 2586-2624.
- Lee, C.-Y., & Morewedge, C. K. (2023). Mental accounting and consumer spending: The case of product

- returns. *Journal of Consumer Psychology*, 33(2), 210-225.
<https://myscp.onlinelibrary.wiley.com/doi/full/10.1002/jcpy.1354>
11. Morse, A., Nguyen, T., & Waller, S. (2020). Digital wallets and youth spending behavior. *Journal of Digital Finance*, 6(2), 122-139.
 12. Pritchard, M. E., Myers, B. K., & Cassidy, D. J. (1989). Factors associated with adolescent saving and spending patterns. *Adolescence*, 24(95), 711.
 13. Raut, R., Thorve, H., & Deshpande, A. (2024). Delving into the investment psyche: investigating the determinants influencing individual investors' decision-making. *Journal of Investment Strategies*.
 14. Rifani, R. A., Kamidin, M., & Ramdani, M. R. (2024). Mental Accounting and Self-Control Over Daily Expenses of Students. *Amsir Accounting & Finance Journal*, 2(2), 57-63.
 15. Shah, M. U. D., Khan, I. U., & Khan, N. U. (2024). The role of digital payments in overspending behavior: A mental accounting perspective. *International Journal of Emerging Markets*. <https://doi.org/10.1108/IJOEM-08-2023-1313>.
 16. Singh, M., & Nandan, T. (2024). Investor impulsivity and mental accounting: A gender-centric investigation. *SAGE Open*, 14(1), 22779752241256767. <https://doi.org/10.1177/22779752241256767>.
 17. Soman, D. (2001). The mental accounting of sunk time costs: Why time is not like money. *Journal of Behavioral Decision Making*, 14(3), 169-185. <https://doi.org/10.1002/bdm.370>
 18. Soman, D., & Ahn, H. K. (2011). Mental accounting and individual welfare. *Perspectives on framing*, 65-92.
 19. Sui, L., Sun, L., & Geyfman, V. (2021). An assessment of the effects of mental accounting on overspending behaviour: An empirical study. *International Journal of Consumer Studies*, 45(2), 221-234. <https://doi.org/10.1111/ijcs.12613>
 20. Thaler, Richard H. "Mental accounting matters." *Journal of Behavioral decision making* 12.3 (1999): 183-206.
 21. Thaler, R. H. (Ed.). (2005). *Advances in behavioral finance*, Volume II. Princeton University Press.
 22. Friedline, T., Elliott, W., & Nam, I. (2012). Predicting savings and mental accounting among adolescents: The case of college. *Children and Youth Services Review*, 34(9), 1884-1895.
 23. Wagner, J., & Walstad, W. B. (2023). Gender differences in financial decision-making and behaviors in single and joint households. *Journal of Consumer Affairs*, 57(4), 1456-1478. <https://doi.org/10.1177/05694345221076004>
 24. Webley, P., & Plaisier, Z. (1998). Mental accounting in childhood. *Citizenship, Social and Economics Education*, 3(2), 55-64.
 25. Xiao, J. J., & Porto, N. (2017). Financial education and behavior. In J. J. Xiao (Ed.), *Handbook of Consumer Finance Research* (pp. 193-208). Springer.