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Mental Accounting and Decision-Making among Sport Gamblers in Nigeria

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ABSTRACT

This study aimed to investigate the relationship between mental accounting and decision-making among sport gamblers in Nigeria. Specifically, it sought to examine how categorisation of funds for gambling, perception of winnings and losses, and separation of gambling funds from regular income influences gambling choices. The study employed a descriptive survey research design with a sample size of 200 sport gamblers. Data were collected through structured questionnaires. Participants were selected using a simple random sampling technique to ensure diverse representation across various demographic factors. The findings revealed that categorisation of funds ($t = 3.245, p < 0.05$) and perception of winnings ($t = 2.454, p < 0.05$) had a significant influence on gambling decisions, while the separation of gambling funds ($1.122, p > 0.05$) did not significantly contribute to the model. The joint influence of all three components of the mental accounting on gambling decisions was significant ($F = 43.872, p < 0.05$). The regression model showed an R-squared value of 0.423, indicating that 42.3% of the variance in decision-making could be explained by mental accounting. The study concluded that mental accounting plays a crucial role in shaping decision-making among sport gamblers in Nigeria, highlighting its relevance for understanding gambling behaviour.

INTRODUCTION

The difference between gambling and investing is known to be blurry in terms of the return expected from the undertaking. However, the distinguishing factor is in terms of risk borne. While investment is assuming risk to generate return, gambling is undertaking risk for the purpose of enjoying risk taking. This is the reason why a gambler cannot be satisfied with winning because the objective is not to win but the enjoyment that comes with taking risks. Sports betting had grown rapidly in Nigeria, becoming one of the most widespread forms of gambling, particularly among young adults. The psychological and financial implications of this trend were significant, as many participants experienced losses that extended beyond monetary value. Mental accounting, a cognitive theory explaining how individuals subjectively classify and evaluate financial transactions, had been identified as a potential framework for understanding these behaviours. While commonly applied in consumer finance, its relevance to gambling—especially in the context of sports betting—remained underexplored in Nigerian settings, where socio-economic pressures and cultural acceptance of gambling played critical roles.

In the Nigerian environment, sports betting had been driven by technological advancement, particularly the accessibility of mobile devices and internet connectivity. This shift allowed gambling to move from physical venues to private digital spaces, making it more appealing and accessible. Unlike in Western contexts where regulatory oversight and public awareness campaigns were more prevalent, Nigerian bettors often operated in unregulated

spaces. The lack of mental health infrastructure and limited public discourse about the psychological dimensions of gambling further complicated the issue. As betting became more embedded in everyday life, particularly among unemployed and underemployed youth, the need to understand the cognitive mechanisms that sustained these behaviours became more pressing.

Research had consistently shown that mental accounting influenced how people allocated money for gambling and justified continued participation despite repeated losses. Bettors often separated gambling funds from regular income, perceiving them as expendable or as investments with the potential for high returns. This segmentation allowed individuals to maintain the illusion of control and rational decision-making, even when outcomes contradicted logic. Evidence from Nigerian studies suggested that these tendencies were pronounced among sport gamblers, many of whom displayed cognitive rigidity and struggled with tasks requiring flexible thinking, such as those assessed in set-shifting exercises (Nweze *et al.*, 2020).

While global literature provided robust insights into the role of mental accounting in gambling, few studies had contextualised these findings within the unique socio-economic realities of Nigerian gamblers. For example, motivations for betting in Nigeria often included the desire for quick financial gain, influenced by peer pressure and aggressive marketing from betting companies (Daniel *et al.*, 2023). Problem gambling had also been linked to academic decline, mental health challenges, and risky financial behaviour among students and young adults

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(Daniel *et al.*, 2024).

Despite these findings, little empirical work had been done to explore how mental accounting shaped sport gamblers' decisions in Nigeria. This gap was concerning, given the country's high rates of youth gambling and the growing evidence of related harms. Therefore, the study aimed to examine the role of mental accounting in decision-making among Nigerian sport gamblers, identifying the financial categorisations they applied, how they perceived wins and losses, and how these perceptions influenced ongoing betting behaviour. The intention was to provide a clearer understanding of gambling psychology in the Nigerian context, with implications for policy, education, and intervention strategies.

LITERATURE REVIEW

Mental accounting refers to a cognitive process where individuals mentally separate their money into different accounts based on subjective criteria such as the source of the funds or their intended use. This psychological mechanism often leads people to treat money differently depending on these mental categories, even though, from an economic perspective, all money should be fungible. For example, a person may allocate a bonus strictly for leisure spending while treating regular income with more caution. In this way, mental accounting influences financial decisions, often resulting in irrational behaviours, such as increased risk-taking with money perceived as a "windfall" (Thaler, 1985). Mental accounting provides a useful framework for understanding why individuals may engage in risky financial behaviours, such as gambling, as they compartmentalise money and treat it differently based on its source.

Gambling, in a general sense, is the act of wagering money or valuables on an event with an uncertain outcome, primarily driven by the hope of winning more than was staked. It can take various forms, including casino games, lotteries, and betting on sports. Sport gambling, a subset of gambling, involves predicting the outcome of sports events and placing bets based on those predictions. In Nigeria, sport gambling has become widespread, largely fuelled by mobile technology, youth unemployment, and aggressive marketing by betting companies (Okechukwu, 2022). Many young Nigerians engage in daily or weekly betting, often viewing it as an alternative income source. The rapid rise of mobile betting platforms has made sports gambling more accessible and attractive, contributing to its popularity in Nigerian society (Daniel *et al.*, 2024).

Mental accounting plays a significant role in the behaviour of sport gamblers. Bettors often categorise their gambling funds separately from their main income, thereby justifying repeated betting activities and minimising the perceived loss. For instance, when a gambler sets aside a specific amount as "betting money," losses incurred within this category may be seen as less consequential. Similarly, money won from betting is frequently viewed as expendable, leading to further risk-

taking. This cyclical behaviour reinforces gambling habits, which may eventually escalate to problematic levels. As noted by Thaler (1985), mental accounting biases, such as the tendency to treat gambling winnings as "house money," make gamblers more likely to take risks, further fueling gambling behaviours. This type of cognitive distortion is a key factor in understanding why some individuals continue to gamble despite significant losses (Lea *et al.*, 1995).

The theoretical foundation for this study is Thaler's mental accounting theory, which emerged from behavioural economics. Thaler posited that individuals do not always behave rationally with money; instead, they use mental frameworks to simplify financial decision-making. In the context of gambling, this theory helps explain why bettors continue to stake funds despite losses or financial hardship. The mental separation of gambling money from other financial resources allows gamblers to rationalise their behaviour, often leading to increased financial risk and potential addiction. Several studies have demonstrated the applicability of mental accounting in explaining gambling behaviours. For instance, research on gambling and mental accounting has shown that individuals tend to mentally segregate their gambling funds, leading to distorted risk perceptions and increased betting activity (Binde, 2007; O'Connor & Kosslyn, 2017). Empirical research on the connection between mental accounting and sport gambling in Nigeria has produced a mix of findings. In a cross-sectional study conducted among undergraduates at a Nigerian university, Daniel *et al.* (2023) found that sport gambling was prevalent, with monetary gain being the primary motivation. The study noted that many students allocated specific funds for gambling and displayed repeated betting behaviour, consistent with mental accounting tendencies. However, the research did not isolate mental accounting as a predictive factor, suggesting that other influences such as peer pressure and digital access played significant roles (Daniel *et al.*, 2023).

Another study by Okechukwu (2022) reviewed the need for a national epidemiological framework to understand gambling disorders in Nigeria. The paper emphasised that while psychological factors such as risk perception and cognitive distortions were evident among gamblers, the role of mental accounting remained largely unexplored. This omission points to a research gap that this study aims to fill, reinforcing the relevance of mental accounting in sport gambling decisions (Okechukwu, 2022).

Further supporting the theory, Daniel *et al.* (2024) presented a comprehensive review of youth gambling in Nigeria, identifying that youth often engage in repetitive betting behaviours driven by emotional gratification and perceived control. Though the authors did not specifically examine mental accounting, their findings align with the principle, as participants frequently treated gambling funds as separate from their daily expenses, encouraging more risk-taking behaviour (Daniel *et al.*, 2024).

However, contrasting findings exist. In a study by Joel *et al.* (2023), demographic variables such as income,

education, and age were not significantly associated with sport gambling participation. This finding indirectly challenges the explanatory power of mental accounting, suggesting that in some Nigerian contexts, sport gambling may be more socially embedded and less influenced by individual financial cognition. Instead, structural and social determinants such as peer influence and lack of alternative income may dominate (Joel *et al.*, 2023). Similarly, Shipurut and Dauda (2024) found that while sport gambling had a significant negative impact on academic performance and mental well-being among university students, the study did not find mental accounting to be a critical explanatory factor. Their analysis suggested that the emotional and social consequences of gambling outweighed rational financial decision-making, pointing to the importance of broader contextual factors (Shipurut & Dauda, 2024).

Despite the divergence in findings, the literature generally supports the idea that mental accounting influences sport gambling behaviour to some extent, although its impact may be moderated by environmental, psychological, and socio-economic factors. Some studies affirm its explanatory strength, particularly in how gamblers justify continuous betting, while others point to its limited role when broader contextual variables are considered. This mixed evidence highlights the complexity of gambling behaviour and underscores the need for focused studies that examine how mental accounting interacts with individual and societal factors in shaping betting decisions in Nigeria.

MATERIALS AND METHODS

Area of Study

This study was conducted in Nigeria, focusing on university students who actively engage in sports betting. The choice of this population is due to the significant participation of students in sports gambling within the country, where online and offline sports betting has seen a rapid increase.

Research Design

A descriptive survey research design was employed in this study. This design is suitable for exploring the relationship between mental accounting and decision-making in sports gambling. It allows for the collection of quantitative data from a sample to make generalisations about the population.

Population and Sample Size

The population of the study consisted of Nigerian university students who actively engage in sports betting. A sample size of 200 respondents was selected through a simple random sampling technique. This technique ensures that every individual in the population has an equal chance of being selected, which reduces bias and enhances the generalisability of the findings.

Sampling Technique

The respondents were selected using a simple random

sampling method. This method was chosen to ensure that the sample accurately represents the population of sports gamblers in Nigeria. The sample size of 200 was determined to be adequate for the analysis, providing enough data to achieve statistical significance.

Research Instrument

A self-administered questionnaire was used as the primary research instrument. The questionnaire was divided into three sections: Section A collected demographic data, Section B measured the independent variable (mental accounting), and Section C focused on the dependent variable (gambling decision-making). The questionnaire was designed with clear and concise Likert-scale questions to capture the attitudes and behaviours related to mental accounting practices in gambling.

Validity of Research Instrument

The validity of the research instrument was ensured through expert reviews. The instrument was initially tested in a pilot study conducted on a small sample to assess its clarity and relevance. Feedback from experts in behavioural economics and psychology was incorporated into the final version of the questionnaire. The content validity was also confirmed by a panel of subject matter experts.

Measurement of Variables

The independent variable, mental accounting, was measured using three components: (1) categorisation of funds for gambling, (2) perception of winnings and losses, and (3) separation of gambling funds from regular income. These components were chosen based on Thaler's (1985) mental accounting theory, which proposes that individuals mentally separate their financial resources based on the intended use.

The model for the study was formulated as follows:

$$GDM = \beta_0 + \beta_1 COF + \beta_2 POW + \beta_3 SOF + \epsilon$$

Where,

GDM represents gambling decision-making (dependent variable), COF represents categorisation of funds, POW represents perception of winnings, and SOF represents the separation of gambling funds (independent variables).

Data Analysis Method

The collected data were analysed using both descriptive and inferential statistics. Descriptive statistics, including frequencies and percentages, were used to summarise demographic information and responses to the Likert-scale questions. Inferential statistics, specifically multiple regression analysis, were applied to test the relationships between the independent and dependent variables. Multiple regression was chosen because it allows for the examination of the combined effects of the three mental accounting components on gambling decisions. The data were analysed using SPSS software version 26, with a significance level of 0.05 for all tests.

RESULTS AND DISCUSSIONS

The demographic profile of the respondents is presented in Table 1. The data reflected that the largest group (68.5%) were aged 18-24, followed by 21.5% in the 25-34 age group. Smaller percentages were recorded in the older age bracket. A significant 87% of the respondents were male, while 13% were female. 60% of respondents were

undergraduates, 27.5% were graduates, and 12.5% had completed secondary school. Most respondents (74%) earned less than ₦50,000 monthly while 19% earned between ₦50,000 and ₦150,000 monthly, and 7% earned above ₦150,000. 50% of respondents bet daily, 30% weekly, 12.5% monthly, and 7.5% rarely. According to Table 2, the analysis showed that 50% of

Table 1: Descriptive Statistics of Key Variables

Characteristics	Category	Frequency	Percent
Age	18 - 24	124	68.5
	26 - 35	39	21.5
	36 - 45	11	6
	46 - 55	5	2.5
	56 - 65	3	1.5
Gender	Female	158	87
	Male	24	13
Educational Level	Undergraduate	109	60
	Post Graduate	50	27.5
	Aspirants	23	12.5
Monthly Earnings	Below N50,000	134	74
	Between N50,000 and N150,000	35	19
	Above N150,000	13	7
Frequency of betting	Daily	91	50
	weekly	54	30
	monthly	23	12.5
	Never	14	7.5

Source: Field survey (2025)

respondents agreed they treat the money used for sports betting separately from their other financial resources, aligning with Okechukwu (2022), who suggested mental accounting leads to compartmentalising funds. Additionally, 60% of respondents agreed they allocate a specific amount of money for gambling, supporting the practice of budgeting for gambling (Miebaka *et al.*, 2023). Regarding winnings, 55% agreed that they view gambling winnings as disposable income, consistent with mental accounting theory, which treats winnings as “extra” income (Daniel *et al.*, 2024). Furthermore, 50% agreed they feel less bad about losing money, viewing it as “play”

money, which supports Okechukwu’s (2022) finding that mental accounting reduces emotional distress related to gambling losses. Additionally, 65% of respondents agreed they separate gambling funds from regular savings, reinforcing the role of mental accounting in creating financial boundaries (Miebaka *et al.*, 2023). Finally, 40% agreed they feel less stressed about losing money because it is viewed as a calculated risk, supporting Daniel *et al.* (2024), who found that mental accounting mitigates the emotional impact of gambling losses. These findings confirm that mental accounting

Table 2: Descriptive Statistics of Key Variables

Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean	Standard Deviation
Categorisation of Funds							
I treat the money I use for sports betting separately from my other financial resources.	50 (27.47%)	80 (44.04%)	30 (16.48%)	12 (6.59%)	10 (5.49%)	3.83	1.13
I allocate a specific amount of money for gambling, and I do not use it for other expenses.	60 (32.97%)	70 (38.46%)	20 (10.99%)	15 (8.24%)	12 (6.59%)		

Perception of Winnings and Losses							
I view the money I win from betting as extra income that I can freely spend.	55 (30.22%)	85 (46.70%)	25 (13.74%)	10 (5.49%)	7 (3.85%)	3.95	0.97
I feel less bad about losing money in sports betting because I see it as 'play' money.	50 (27.47%)	95 (52.20%)	25 (13.74%)	5 (2.75%)	7 (3.85%)		
Separation of Gambling Funds							
I separate the funds I use for gambling from my regular savings or emergency funds.	65 (35.71%)	75 (41.23%)	40 (22.02%)	15 (8.24%)	10 (5.49%)	3.80	1.04
When I lose money from gambling, I don't feel as stressed because I consider it a risk.	40 (21.98%)	100 (54.95%)	35 (19.23%)	15 (8.24%)	7 (3.85%)		

Author's computation (2025)

significantly influences sports gambling decisions in Nigeria, with a high mean between 3.80 and 3.95. The analysis of Table 3 showed that 55% of respondents agreed that categorising gambling money influences the frequency of sports betting, supporting the idea that mental accounting drives betting behaviour (Miebaka *et al.*, 2023). Similarly, 65% agreed that having a separate fund for betting encourages more frequent gambling, further confirming that isolated gambling funds promote riskier behaviour (Okechukwu, 2022). Regarding the perception of winnings, 70% agreed that viewing winnings as “free” money encourages more bets,

consistent with mental accounting theory that treats winnings as expendable income (Daniel *et al.*, 2024). Additionally, 65% agreed they continue gambling to recover “play” money lost, indicating that gamblers often see losses as part of the risk, reducing emotional distress (Miebaka *et al.*, 2023). 80% agreed that separating betting funds from savings leads to riskier betting decisions, and 85% agreed that winning money increases gambling activity. These findings show that mental accounting significantly influences risk-taking in gambling, with a high mean of 4.05 across all statements.

Table 3: Influence of Mental Accounting on Gambling decisions

Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)	Mean	Standard Deviation
Impact of Mental Accounting on Gambling Decisions: 1. The way I categorise my gambling money influences how often I engage in sports betting.	55 (30.22%)	75 (41.23%)	20 (10.99%)	15 (8.24%)	10 (5.49%)	3.86	1.12
Impact of Mental Accounting on Gambling Decisions: 2. I tend to gamble more frequently when I have a separate fund designated for betting.	65 (35.71%)	70 (38.46%)	15 (8.24%)	10 (5.49%)	10 (5.49%)	4	1.11

Impact of Mental Accounting on Gambling Decisions: 3. The perception of 'free' money from gambling winnings encourages me to place more bets.	70 (38.46%)	80 (44.04%)	10 (5.49%)	10 (5.49%)	7 (3.85%)	4.11	1.01
Impact of Mental Accounting on Gambling Decisions: 4. When I lose money, I continue gambling to recover the 'play' money I had allocated.	65 (35.71%)	85 (46.70%)	15 (8.24%)	5 (2.75%)	7 (3.85%)	4.11	0.95
Impact of Mental Accounting on Gambling Decisions: 5. I make riskier betting decisions when I separate my betting funds from my personal savings.	80 (44.04%)	75 (41.23%)	20 (10.99%)	15 (8.24%)	7 (3.85%)	4.05	1.06
Impact of Mental Accounting on Gambling Decisions: 6. I am more likely to increase my gambling activity when I win money from betting.	85 (46.70%)	85 (46.70%)	25 (13.74%)	10 (5.49%)	5 (2.75%)	4.12	0.96

Source: Author's computation (2025)

A multiple regression analysis was conducted to test the hypothesis regarding the influence of mental accounting (categorisation of funds, perception of winnings, and separation of gambling funds) on gambling decisions. The results, as shown in Table 3, indicate that mental accounting had a positive relationship with gambling decisions. Specifically, the categorisation of funds ($t = 3.245, p < 0.05$) and perception of winnings ($t = 2.454, p < 0.05$) had a significant influence on gambling decisions, while the separation of gambling funds ($t = 1.122, p > 0.05$) did not significantly contribute to the model.

This suggests that the way individuals categorise their gambling funds and perceive their winnings significantly influences their gambling behaviour. Thus, it is important

for policymakers and gambling intervention programs to focus on the mental accounting practices of categorising funds and viewing winnings as expendable income to mitigate excessive gambling.

Moreover, the joint influence of all three components of mental accounting on gambling decisions was significant ($F = 43.872, p < 0.05$), indicating that categorisation of funds, perception of winnings, and separation of gambling funds together significantly influence gambling decisions. The coefficient of determination ($R^2 = 0.423$) revealed that mental accounting explained 42.3% of the variation in gambling decisions. These results suggest that mental accounting plays a substantial role in shaping gambling behaviour in Nigeria.

Table 4: Multiple Regression Results for Emissions Reduction

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.652a	0.423	0.398	22015.62

a Predictors: (Constant), COF, POW, SOF

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1236829809.52	3	412276603.17	43.872	.000b

	Residual	1680678263.34	179	9389264.04		
	Total	2917508072.34	182			

a Dependent Variable: GDM

b Predictors: (Constant), COF, POW, SOF

Coefficients ^a						
Model	Independent variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
1		B	Std. Error	Beta		
	(Constant)	12655.34	10.65		1.16	0.246
	COF	0.748	0.23	0.299	3.245	0.001
	POW	0.568	0.232	0.277	2.454	0.014
	SOF	0.123	0.11	0.049	1.122	0.263

a Dependent Variable: GDM

Source: Author's computation (2025)

Discussion of Findings

The findings of this study highlight the significant role of mental accounting in influencing gambling behaviours in Nigeria. A large portion of respondents indicated that they mentally categorised their gambling funds separately from other financial resources, supporting Thaler's (1999) theory of mental accounting, which suggests that individuals treat money differently based on its source or intended use. This finding aligns with the work of Radianto *et al.* (2022), who confirmed that mental accounting influences financial decisions by encouraging individuals to assign specific funds for different purposes. However, the study also found that not all aspects of mental accounting were significant in influencing gambling decisions, particularly the separation of gambling funds from savings. This contrasts with research by Zhang and Sussman (2017), who suggested that the mental partitioning of funds plays a critical role in financial decision-making. The lack of significant impact from fund separation in this study could be attributed to different socio-economic contexts, as evidenced by Swacha-Lech and Solarz (2019), who observed that demographic factors, such as debt aversion and income level, could mediate the effects of mental accounting on financial decisions.

Overall, the findings underscore the importance of mental accounting in shaping gambling behaviour, while also highlighting the complexity of its influence. Further research is needed to explore other moderating factors, such as socio-economic conditions, that may affect the mental accounting process in gambling.

CONCLUSION

The findings of the study reveal that mental accounting significantly influences sports gambling decisions in Nigeria. Participants frequently separate their gambling funds, view winnings as disposable income, and rationalise losses as part of the risk, supporting the theory that mental accounting shapes financial behaviour. However, not all components of mental accounting

had a significant impact, indicating that other factors might influence gambling decisions. Based on these conclusions, it is recommended that gambling regulation and intervention programs focus on mental accounting practices, particularly the categorisation of funds and perception of winnings, to mitigate excessive gambling behaviours in Nigeria.

REFERENCES

Binde, P. (2007). Gambling, the risk of addiction, and social costs. *European Journal of Social Psychology*, 37(2), 271-284.

Daniel, F. M., Gbuchie, M. A., Aniebiet, C. M., Emeruwa, V. E., & Ike, W. I. (2023). Exploring sports betting prevalence, patterns, effects, and associated factors among undergraduate students in a Nigerian University—A cross-sectional study. *International Journal of Medical Students*, S113-S113. <https://doi.org/10.5195/ijms.2023.2371>.

Joel, K., Dauda-Olajide, R., & Awosika, O. (2023). Sports gambling among youths: The role of demographic factors and prevalence. *Shodh Sari-An International Multidisciplinary Journal*. <https://doi.org/10.59231/sari7579>.

Lea, S. E., Webley, P., & Walker, M. (1995). Psychological aspects of gambling. *American Behavioral Scientist*, 38(3), 476-485.

Miebaka, D. F., Gbuchie, M., Aniebiet, C. M., Emeruwa, V., Ike, W. I. (2023). Exploring sports betting prevalence, patterns, effects, and associated factors among undergraduate students in a Nigerian university. *International Journal of Medical Students*. 11(3) 16-25

Nweze, T., Agu, E., & Lange, F. (2020). Risky decision making and cognitive flexibility among online sports bettors in Nigeria. *International Journal of Psychology*, 55, 995 - 1002. <https://doi.org/10.1002/ijop.12663>.

O'Connor, K., & Kosslyn, S. (2017). Mental accounting in decision making. *Journal of Behavioral Economics*, 58(1), 13-26.

Okechukwu, C. (2022). The need for a nationwide

- epidemiological study on the gambling disorder caused by compulsive sports betting in Nigeria: A narrative review. *Apollo Medicine*, 19, 32 - 36. https://doi.org/10.4103/am.am_124_21.
- Radianto, W., Salim, I., Christian, S., Efrata, T., & Dewi, L. (2022). Does Mental Accounting Play an Important Role in Young Entrepreneurs? Studies on Entrepreneurship Education. *Journal of Educational and Social Research*. <https://doi.org/10.36941/jesr-2022-0040>.
- Shipurut, G., & Dauda, G. (2024). Sport Betting Among Students of Federal University Wukari, Taraba State, Nigeria. *International Journal of Humanities, Education, and Social Sciences*. <https://doi.org/10.58578/ijhess.v2i3.4170>.
- Swacha-Lech, M., & Solarz, M. (2019). Mental accounting in the context of savings and credit decisions. Evidence from Poland. *Argumenta Oeconomica*. <https://doi.org/10.15611/aoe.2019.2.15>.
- Thaler, R. (1999). Mental accounting matters. *Journal of Behavioral Decision Making*, 12, 183-206. [https://doi.org/10.1002/\(SICI\)1099-0771\(199909\)12:3<183::AID-BDM318>3.0.CO;2-F](https://doi.org/10.1002/(SICI)1099-0771(199909)12:3<183::AID-BDM318>3.0.CO;2-F).
- Zhang, C., & Sussman, A. (2017). The Role of Mental Accounting in Household Spending and Investing Decisions. *Behavioral & Experimental Finance eJournal*. <https://doi.org/10.1002/9781119440895.CH6>.