

# Money Attitudes, Mental Accounting, and Compulsive Buying Behavior Among Football Supporters

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**Abstract.** Financial behavior, especially among the specific community, is the researcher's concern, which is related to how psychological responses in the form of money attitudes and mental accounting can influence compulsive buying behavior in members of the football supporter community. Some exciting things that motivated this research were triggered by a curiosity about whether business processes at football clubs are capable of influencing financial behavior among their stakeholders. One phenomenon, CHLS – consumer hypnotic-like suggestion- a form of compulsive buying behavior- is thought to appear in this community. It is a concern for researchers to examine whether money attitude and mental accounting affect compulsive buying behavior. The analysis using multiple linear regression tests showed that money attitude and mental accounting affect compulsive buying behavior. The findings related to money attitude are in line with previous theories and findings. In contrast, mental accounting, although influential, should affect negatively so that the better the mental accounting, the more compulsive buying behavior will decrease. However, the findings of this study prove otherwise, so it is suspected that the expenditure priority scale factor is the cause of the anomaly of this study's findings. In addition, the analysis of respondents' profiles also corroborated allegations of research results that were not in harmony with mental accounting theory.

**Keywords:** Compulsive buying  $\cdot$  Football supporter  $\cdot$  Mental accounting  $\cdot$  Money attitude

### 1 Introduction

The existence of football supporters is inextricable from the existence of football clubs. Each party contributes to the sustainability of a mutualistic system. As long as there are supporters who attend each game, football clubs will continue to exist. In order to compete in the football industry, a football club must have a viable business strategy to secure financial backing for the club's continued existence.

Several income sources that are mapped to be part of a football club's commercial process include tickets, sponsors, and merchandise [1]. The existence of militant supporters for a football club is an intangible asset that has the potential to provide a significant amount of revenue for the club, particularly through ticket and merchandise sales.

To encourage supporters to spend their money, it is necessary to have a sufficient understanding of the mapping of the psychological response that occurs so that a decision to spend the money is made, hence increasing the football club's income. One of the previous studies alluded to CHLS – consumer hypnotic-like suggestibility, a condition of the tendency to respond positively to inducements to buy goods unplanned [2], as a form of psychological response that business process managers at football clubs can use to induce compulsive buying on ticket and merchandise sales.

Theoretically, compulsive buying behavior can be defined as aberrant buying behavior characterized by a drive to buy that tends to be uncontrollable, repetitive, and oblivious to the consequences [3, 4] as a response to poor self-confidence combined with feelings of alienation/anxiety, and an orientation of joy that comes from the material [5].

Previous study relating compulsive buying behavior with self-esteem/self-confidence indicates that those with low self-confidence are more likely to behave compulsively while making purchases compared to those with high self-confidence [3]. Hanley found that they engage in compulsive purchasing because they believe that money will represent their metaphorical abilities [4] and boost their self-confidence.

Several psychological responses are also associated with compulsive purchasing behavior, including money attitude [3–9]. Money attitude can be defined simply as attitudes, feelings, and individual motives pertaining to money. The positive approach to this variable describes money attitude as a person's propensity to engage in future financial planning, particularly the behavior of saving and reducing expenses [9]. In the context of this research, however, money attitude or attitude towards money refers to consumer spending related to the offer of selling tickets and products, as well as other supporting activities to meet their needs as a football club supporter. The significance of this variable is significant since money attitudes will shape consumer culture [10].

It seems sensible that if a community has developed a consumer culture, the money attitude would soon follow, and if football clubs' marketing strategies have a tendency to be extravagant, obnoxious, and alluring, the danger of compulsive buying behavior will increase. Therefore, in this study, the researchers propose the H1 hypothesis: money attitude has a positive influence on compulsive buying behavior.

The following psychological response is mental accounting. Individuals and households utilize mental accounting to code, categorize, and evaluate their financial activities [11–14]. Mental accounting focuses on how an individual should respond and analyze a situation where there are two or more alternative outcomes, particularly how to combine these results. Individuals assign distinct utility values to each wealth account, which determines their consumption choices.[12].

Previous research has demonstrated a correlation between mental accounting in student life and financial decision-making and the treatment of income sources [15]. Several variables that are also related to this topic are financial literacy and lifestyle [5, 16]. In the context of this study, mental accounting will be one of the factors utilized to



Fig. 1. Research Design

predict compulsive purchase behavior in response to activity connected to football club offers.

This study is concerned with mental accounting because researchers want to determine whether individuals have appropriate mental accounting skills for practicing personal financial management, so that they can make spending decisions and refrain from behaving compulsively while making purchases. This study therefore proposes the following hypothesis H2: mental accounting has a negative effect on compulsive buying behavior.

The objective of this research is to determine the psychological response maps that drive compulsive buying behavior, particularly in reaction to football club offers for ticket and merchandise sales to supporters and the community at large. This phenomenon adds to the study of behavioral accounting, particularly in terms of identifying the elements that influence individual financial decisions. This study aimed to determine whether money attitude and mental accounting influence compulsive buying behavior, particularly in the CHLS phenomena — consumer hypnotic-like suggestibility that happens among sympathizers, supporters, and the general public in response to offers from football teams.

Figure 1 shows the research design.

#### 2 Method

This study is a quantitative descriptive study in which data is collected using an online form-based survey (Google form) and processed with SPSS 26.0. The population sampled consists of the general public, PSS Sleman supporters, and football supporters. The sampling technique employed is purposive random sampling. The sample size for this study was 230 respondents. The number of samples is chosen following the rules established by Hair and colleagues [17].

For the analysis test of the study instrument, data validity and reliability tests were utilized. Then, prior to doing the analytical test with multiple linear regression, the classical assumption test was conducted.

### 3 Results

The Figs. 2 and 3 show the profiles of research participants.

## Respondent Profil- Gender

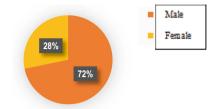


Fig. 2. Respondent's profile based on gender

### Respondent Profil - Age

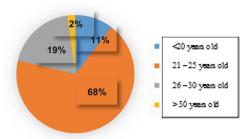


Fig. 3. Respondent's profile based on age

# Respondent Profile - Educational Level

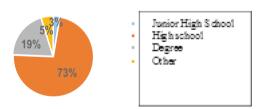


Fig. 4. Respondent's profile based on education

It can be seen from the age and gender profiles that the majority of participants are men between the ages of 21 and 25. In terms of educational background, those with a high school/vocational high school/equivalent education background predominate. The 1 million to 2 million rupiah bracket dominates the income distribution, as seen by the income profile.

Because this research issue pertains to a certain community, the respondent's profile is one of the most crucial factors in the process of interpreting research data (Figs. 4 and 5).

# Respondent Profil - Income

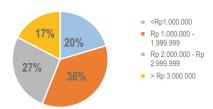


Fig. 5. Respondent's profile based on income

Table 1. Validity testing of research instruments

Variable	Item	Person Correlation	Sig	Description
Money attitude	X.1	0,315	0,000	Valid
	X.2	0,308	0,000	Valid
	X.3	0,497	0,000	Valid
	X.4	0,484	0,000	Valid
	X.5	0,524	0,000	Valid
	X.6	0,470	0,000	Valid
	X.7	0,508	0,000	Valid
Mental accounting	X2.1	0,782	0,000	Valid
	X2.2	0,760	0,000	Valid
	X2.3	0,854	0,000	Valid
	X2.4	0,827	0,000	Valid
	X2.5	0,741	0,000	Valid
Compulsive buying	Y.1	0,809	0,000	Valid
	Y.2	0,791	0,000	Valid
	Y.3	0,758	0,000	Valid
	Y.4	0,737	0,000	Valid
	Y.5	0,787	0,000	Valid
	Y.6	0,696	0,000	Valid
	Y.7	0,788	0,000	Valid
	Y.8	0,179	0,007	Valid
	Y.9	0,664	0,000	Valid

After determining the respondent profile, the following stage is to examine the validity and dependability of the research instrument. The results of the tests are presented in Tables 1 and 2.

Table 2.	Renability	resung	

Variable	Cronbach Alpha	Description
Money attitude (X1)	0,857	Reliable
Mental accounting (X2)	0,852	Reliable
Compulsive buying (Y)	0,862	Reliable

Table 3. Data Normality Test

One-Sample Ko	lmogorov-Smirno	v Test		
		Unstandardized Residual		
N	230			
Normal	Mean	.0000000		
Parameters <sup>a,b</sup>	Std. Deviation	6.09799440		
Most Extreme	Absolute	.057		
Differences	Positive	.045		
	Negative	057		
Test Statistic	.057			
Asymp. Sig. (2-	.066 <sup>c</sup>			
a. Test distribution is Normal.				
b. Calculated from data.				
c. Lilliefors Significance Correction.				

Table 4. Multicollinearity Test

Model	Collinearity Statistics	
	Tolerance	VIF
Money attitude	0,988	1,022
Mental accounting	0,988	1,022

Based on the test findings reported in Tables 1 and 2, the research instrument is valid and reliable, thus it can be used in research since it complies with research requirements.

According to Table 3, the unstandardized residual value of the data is 0.66, which is higher than 0.05. Thus, it is evident that the study's data were normally distributed.

Model	Т	Sig.
(Constant)	5,049	0,000
Money attitude	-1,896	0,059
Mental accounting	-1,389	0,166

Table 5. Heteroscedasticity Test

Table 6. Autocorrelation Test

Durbin Watson	N	D	DL	DU	4-DL	4-DU
1,882	230	1,882	1,775	1,792	2,225	2,208

**Table 7.** Multiple regression test results (t-test)

Variable	Coefficient B	Sig	Description
(Constant)	7,758	0,000	Significant
Money attitude (X1)	0,283	0,000	Significant
Mental accounting (X2)	0,479	0,000	Significant

The tolerance values of the two independent variables presented in Table 4 are 0.988;0.988 > 0.10 and the VIF values of the two independent variables are 1.022;1.022 < 10 therefore it can be inferred that none of the independent variables used are correlated with other independent variables (Table 5).

In the table it can be seen that the significance value is greater than 0.05 so it can be concluded that there is no heteroscedasticity.

Based on Table 6, the DW value is 1.882, while from the DW table with a significance of 0.05 and the number of data (n) = 230, and k = 2 (k is the number of independent variables) the values dL = 1,775, and dU = 1,792. Because the value of DU < D < 4-DU = 1,792 < 1,882 < 2,208 it can be concluded that there is no autocorrelation. Thus, all conditions for the whole classical assumption test have been fulfilled.

In addition, hypothesis testing will involve several regression analysis tests. The results of the multiple regression test are reported in Table 7.

From the table above, a multiple linear regression equation model can be obtained from the calculation results as follows:

$$Y = 7,758 + 0,283 X1 + 0,479 X2 + e$$

With the interpretation of the results, a positive value on the B coefficient in the variable X1 indicates that there is a unidirectional relationship between money attitude (which in this case is a proxy for the value of consumer spending) and compulsive buying; that is, if the money attitude is more positive, it will lead to an increase in compulsive behavior.

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	
1	,615 <sup>a</sup>	,379	,373	5,283	
a. Predict	tors: (Const	ant), Mental ac	counting, Money attitude	,	

Table 8. Coefficient of Determination

Moreover, the positive value of the B coefficient in variable X2 implies that mental accounting and compulsive buying behavior have a unidirectional relationship; if mental accounting is increased, compulsive buying behavior would increase.

Partially, the research hypothesis is H1: money attitude has a proven effect on the compulsive buying behavior and H2: mental accounting does not have a proven effect on compulsive buying behavior, although it can be seen from the significance value in Table 7 that both show the number 0.000, but the coefficient B both shows a positive number. Therefore, even though H2 has an effect, the direction does not support the notion.

The following test is a validation of the study model whose outcomes are presented in Table 8.

Table 8 reveals that 37.3% of compulsive buying behavior may be described by money attitude and mental accounting, whereas the remaining 62.7% can be explained by variables outside the scope of the study.

## 4 Discussion

This study intends to examine and demonstrate the phenomena of influence between the two independent variables, namely money attitude and mental accounting, on compulsive buying behavior among football supporters. This is significant as an effort to map the amount to which the psychological response to the two independent factors influences the financial conduct of individuals, particularly in a specific context. According to the research findings, the greater the money attitude, the more significant it is on the growth in compulsive buying, which is consistent with the theory that discusses the antecedents of the compulsive buying variable [3]–[8, 10]. In the context of this research, money attitude is more closely associated with consumer spending than with an individual's propensity to engage in future financial planning or restrict expenditure [9], he findings of this study are consistent with prior studies that investigated how self-confidence and selfcontrol are important elements in shaping money attitudes and controlling compulsive buying [18]. However, the results of the research testing the second hypothesis indicate that mental accounting has a positive effect on compulsive buying behavior, while the hypothesis suggests that the direction of the effect is negative. For the results of this second hypothesis test, according to the theory of mental accounting, the higher the mental accounting, the lower the compulsive buying behavior should be, because the mental accounting proxy is an individual's propensity to be able to handle his personal finances, the outcomes of this study are not consistent with the mental accounting theory.

However, if you look at the distribution of the profiles of the respondents, the majority of whom are young and already have income, it is possible that they already have mental

accounting, but the levels are insufficient, or in this football supporter phenomenon they are really facing a consumer hypnotic-like sugestibility situation, a condition of the tendency to respond positively to inducements to buy goods unplanned, similar to the findings of previous research [2], considering that the subject of this research is very likely to be trapped in this condition, especially with the conditions found in the first hypothesis, namely the influence of money attitude on compulsive buying behavior.

Consequently, if you observe the psychological response map that influences compulsive buying behavior, where the findings of this study indicate that mental accounting contributes more strongly to the formation of compulsive buying behavior than money attitude, there is an allegation that the priority scale of expenditure items in this football supporter community places lifestyle as a priority for consumption allocation [5, 10, 16]. The novel conclusion of this study is that even when participants had acceptable mental accounting, compulsive buying behavior would still be affected differently if the priority scale was different. Theoretically, a higher degree of mental accounting should diminish compulsive buying behavior, but the results of this study indicate the opposite; both the level of mental accounting and the amount of compulsive buying are high.

### 5 Conclusion

The results of this study indicate that if psychological responses are mapped in the context of financial management, money attitude influences compulsive buying behavior, whereas mental accounting does not necessarily influence compulsive buying behavior; which of the two influences compulsive buying behavior depends on the priority scale of the respondent's profile. This became the study's findings and provided as motivation to conduct more research by refining the research model and testing priority scales as one of the factors. Among the limitations of the research is the lack of depth in exploring the mental accounting variable from a literacy/knowledge perspective, which is a suggestion for future research.

Authors' Contributions. Wika Harisa Putri Conceptualization, Methodology, Writing; Sungkono Data Curation, Writing; Angelia Pribadi Resources, Writing, Wulan Fitri Annisa Data collecting, Writing; Clara Wuri Data collecting, Visualization.

### References

- S. R. Ika, K. Udin, J. P. Nugroho, and I. J. Koenti, "Assessing the Financial Performance of English Football Clubs: Arsenal and Manchester City," *Proc. 3rd Int. Conf. Banking, Accounting, Manag. Econ. (ICOBAME 2020)*, vol. 169, no. Icobame 2020, pp. 57–62, 2021, doi: https://doi.org/10.2991/aebmr.k.210311.012.
- 2. M. I. Prete, G. Guido, and M. Pichierri, "Consumer hypnotic-like suggestibility: Possible mechanism in compulsive purchasing," *Psychol. Rep.*, vol. 113, no. 1, pp. 1174–1186, 2013, doi: https://doi.org/10.2466/01.18.PR0.113x11z0.
- 3. A. Hanley and M. S. Wilhelm, "Compulsive buying: An exploration into self-esteem and money attitudes," *J. Econ. Psychol.*, vol. 13, no. 1, pp. 5–18, 1992, doi: https://doi.org/10.1016/0167-4870(92)90049-D.

- 4. J. A. Roberts and C. J. S. M, "Journal of International Money Attitudes and Compulsive Buying," *J. Int. Consum. Mark.*, vol. 11, no. 4, pp. 53–74, 1999, doi: https://doi.org/10.1300/J046v11n04.
- Z. Y. Ong, J. L. Lau, and N. Zainudin, "Money attitude, materialism and compulsive buying among Malaysian young adults," *Manag. Sci. Lett.*, vol. 11, pp. 281–290, 2021, doi: https://doi.org/10.5267/j.msl.2020.8.005.
- 6. S. D. D. Sundarasen and M. S. Rahman, "Attitude towards money: Mediation to money management," *Acad. Account. Financ. Stud. J.*, vol. 21, no. 1, p. 2017, 2017.
- N. Abdullah, S. M. Fazli, and A. M. M. Arif, "The Relationship between attitude towards money, financial literacy and debt management with young worker's financial well-being," *Pertanika J. Soc. Sci. Humanit.*, vol. 27, no. 1, pp. 361–387, 2019.
- 8. S. K. Hemrajani, Pragati; Sharma, "Measuring Financial Risk Tolerance: The Role of Socio-Demographic Factors Under the Influence of Attitude Towards Money.," *IUP J. Appl. Financ.*, vol. 26, no. 1, pp. 31–52, 2020, [Online]. Available: https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=142016761&site=eds-live.
- 9. Utkarsh, A. Pandey, A. Ashta, E. Spiegelman, and A. Sutan, "Catch them young: Impact of financial socialization, financial literacy and attitude towards money on financial well-being of young adults," *Int. J. Consum. Stud.*, vol. 44, no. 6, pp. 531–541, 2020, doi: https://doi.org/10.1111/ijcs.12583.
- J. A. Roberts and E. Jones, "Money attitudes, credit card use, and compulsive buying among American college students," *J. Consum. Aff.*, vol. 35, no. 2, pp. 213–240, 2001, doi: https://doi.org/10.1111/j.1745-6606.2001.tb00111.x.
- R. Kivetz, "Advances in Research on Mental Accounting and Reason-based Choice. Risk Perception in the Short Run and in the Long Run.," *Mark. Lett.*, vol. 10, no. 3, pp. 249–266, 1999.
- 12. R. H. Thaler, "Mental Accounting Matters," *J. Behav. Decis. Mak.*, vol. 12, no. September 1998, pp. 183–206, 1999.
- 13. S. Muehlbacher and E. Kirchler, "Individual Differences in Mental Accounting," *Front. Psychol.*, vol. 10, no. December, pp. 1–15, 2019, doi: https://doi.org/10.3389/fpsyg.2019.02866.
- L. Hou, S. C. Hsueh, and S. Zhang, "Digital Payments and Households' Consumption: A Mental Accounting Interpretation," *Emerg. Mark. Financ. Trade*, vol. 57, no. 7, pp. 2079–2093, 2021, doi: https://doi.org/10.1080/1540496X.2021.1887727.
- 15. E. Eldista, A. B. Sulistiyo, and N. Hisamuddin, "Mental Accounting: Memaknai Kebahagiaan Dari Sisi Lain Gaya Hidup Mahasiswa Kos," *J. Akunt. Univ. Jember*, vol. 17, no. 2, p. 123, 2020, doi: https://doi.org/10.19184/jauj.v17i2.15393.
- Dwi Iga Luhsasi, "Pengelolaan Keuangan: Literasi Keuangan dan Gaya Hidup Mahasiswa," J. Ecodunamika, vol. 4, no. 1, pp. 218–231, 2021.
- 17. J. F. Hair, W. C. Black, B. J. Babin, and R. E. Anderson, *Multivariate data analysis*, Pearson Ed. Essex, England, 2014.
- M. Hikmah, S. Worokinasih, and C. R. Damayanti, "Financial Management Behavior: Hubungan Antara Self-Efficacy, Self-Control, dan Compulsive Buying," *PROFIT J. Adm. BISNIS*, pp. 151–163, 2020.

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