

Consumer Debt Management among Government Employees: Cognitive, Emotional and Behavioural

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ABSTRACT

Many people claim that they feel burdened with their debt such as personal loans, hire purchases, housing loans, credit cards, and education loans. The burden that they carry has affected their life such as being unable to pay their debts. They want to live in luxury without thinking about the effect that will drag them to bankruptcy because of many factors that occur while managing their consumer debt. Thus, this study aims to examine the relationship between cognitive, emotional, and behavioural, and consumer debt management among government employees. This study is a descriptive study that distributed a questionnaire to collect the data and used SPSS to analyse the data. The target population is individuals who are employees from government organizations who have experienced using credit for their daily spending, purchasing assets, financing, and investing activities. The questionnaires were equally distributed to 100 employees from 10 government organizations from different positions. It found that there is a significant relationship between behavioural and consumer debt management. However, there is no significant relationship between cognitive and emotional consumer debt management. Good debt management improves the behaviour of government employees to pay their debts every month and understand the relationship between solvency and credit history. In contrast, government employees do not seriously think of their debt and are not emotional when making a decision to do financing. Future research is necessary to investigate how culture and socioeconomic status affect cognitive processes in relation to managing debt. Research should also examine how FinTech applications, including budgeting apps and AI-powered financial guidance, impact individuals' cognitive decision-making processes and their debt management results.

Keywords: Behavioural, Cognitive, Debt Management, Emotional, Employees

1.0 INTRODUCTION

The scenario of indebtedness has been a serious issue among employees. They are not well prepared to manage their personal finance, which contributes to the increment in household debts. In Malaysia, the number of household debt has increased in recent years, reaching 329.8 USD billion in December 2022, compared with the reported number of 329.7 USD billion in the previous year (CEIC, 2023). It was the highest figure compared to its neighbouring countries, including Indonesia, Singapore, and Philippines which indicates that approximately half of the households' monthly income is used to service credit payments. As Malaysia strives to become a high-income nation, the country is grappling with the serious problem of a growing number of bankruptcy cases. It shows that 42.69 percent of bankruptcy cases were employees (Malaysia Department of Insolvency, 2023), where 14,532 employees were declared bankrupt. According to the Malaysia Department of Insolvency (2023), bankruptcy cases happened in different types of credit such as personal loans (16,755 cases), hire purchases (3,782 cases), housing loans (2,818 cases) and credit cards (2,162 cases). These statistics show that the main reason for huge numbers of bankruptcies among employees is a failure in debt management (Narain, 2022).

Even while high levels of indebtedness do not necessarily mean that consumers will not pay their bills, there is a trend for more consumer debt to be left unpaid as debt levels rise. According to Cluster and Stephen (2019), it is generally unknown what over-indebted consumers do in addition to the very infrequent outcomes of bankruptcy. The creditor avoidance phenomenon is widespread but poorly understood. It basically refers to taking a "head in the sand" attitude to managing personal debt. According to Alwi et al. (2023), the previous studies have stressed consumer credit card debt in the context of mental health and personal finance, but there is still a lack of research in the context of specialization in debt management among consumers. The debt management studies are focused more on consumer financial literacy and financial knowledge (Limbu & Sato, 2019; Klapper & Lusardi, 2020; Ansar et al., 2019) and less attention to psychological factors.

Crucial debt management not only has an impact on the financial but also psychological (Ong et al., 2019). This is due to the fact that debt is not perceived as fungible and is seen as a costly mental account that consumes cognitive bandwidth. Additionally, the emotional effects of debt holdings are driven by the mental label that consumers give a particular debt type: "debt" (Greenberg & Mogilner, 2021). Previously, the role of emotions in consumer debt had therefore been neglected but recently more attention has been given to how affective feelings can influence debt decisions. The behavioural includes all explicit behaviours toward debt mainly money management and mental accounting (Callender & Mason, 2017). According to Brown (2019), the more unfavourable parts of human nature, such as laziness, carelessness, or the inability to engage in delayed gratification, may also be included. These difficulties may be particularly relevant to borrowing behaviour in the culture of buy now, pay later. Thus, debt management may be impacted by consumer behavioural patterns as well.

In relation to the above discussions, the purpose of this study is to examine the relationship between cognitive, emotional and behavioural, and consumer debt management among government employees. The remainder of the paper develops as follows. Section 2 presents the existing literature on debt management, cognitive, emotional, and behavioural. Then, Section 3 proceeds to discuss the data and methodology. Section 4 outlines the results and discussions. Finally, Section 6 concludes the study and recommendation.

2.0 LITERATURE REVIEW

Household debt has become a more serious challenge as many bankruptcy cases and social problems evolve due to the inability to repay huge commitments. The availability of easy credit and the use of credit cards have brought many negative effects when they induce excessive expenditure because it is convenient for users to pay with credit without considering affordability. As reported by CEIC 2023, the amount of household debt in Malaysia has increased in recent years and was 329.8 USD (88.2%) in December 2022. That was the highest figure compared to neighbouring countries such as Indonesia (17.2%), Singapore (69.7%) and the Philippines (9.9%), which shows that about half of a household's monthly income is spent on credit payments. Household debt occurs when the amount of money that all adults in a household owe financial institutions and includes consumer debt and mortgage loans. It is an obligation or liability arising from borrowing money or taking goods or services "on credit", i.e. against an obligation to pay later. This matter led to a growing number of bankruptcy cases and it is struggling with serious problems when

Malaysia is striving to become a high-income country. Malaysia Department of Insolvency (2023) reported that 14,532 (42.69%) employees were declared bankrupt and they are mostly involved in personal loans. The bankruptcy cases happened in different types of credit such as personal loans (16,755 cases), hire purchases (3,782 cases), housing loans (2,818 cases) and credit cards (2,162 cases). Evidently, the statistics confirmed that the huge number of bankruptcies among employees is due to the failure in debt management (Narain, 2022)

2.1 Debt Management

Olson and Rick (2018) stressed that consumer researchers have devoted much attention to the processes by which people accumulate debt, but we know less about how consumers manage their existing debt. Furthermore, understanding and ultimately improving debt management practices is important because carrying excessive debt carries many financial, affective, and even cognitive costs (Mani et al. 2013). Excessive debt predicts increased stress and decreased physical well-being (Sweet et al. 2013), controlling for other important predictors of these outcomes. Debt can also cause interpersonal problems, such as excluding potential employers who have access to applicants' credit information (Rivlin 2013). Furthermore, according to Alwi et al. (2023), most of the previous research discussed the effect of consumer credit card debt in the context of mental health (Dackehag et al. 2019) and personal financial sustainability (Daud et al. 2019; Hauff et al., 2020). There is also some systematic literature highlighting studies that have been done in the context of debt such as Turunen and Hiilamo, (2014); Amit et al., (2020), but there is still a lack of research in the context of specialization in debt management among consumer.

Studies have explored how well debt consolidation loans or other programmes work in terms of improving an individual's ability to manage their debt efficiently. Research frequently examines whether combining several loans into one, lower-interest loan improves the likelihood of repaying those debts (Durkin & Elliehausen, 2006). Thus, behavioural economics has been crucial in helping us understand why people get into debt and how to help them manage their money to make better financial decisions. Concepts including loss aversion, mental accounting, and the function of emotions in managing debt are explored in this field of study (Gathergood, 2012).

Research has also shown how crucial financial education is in equipping individuals with the information and abilities required for efficient debt management. Financial literacy programmes' effects on debt reduction and prudent borrowing are frequently evaluated in studies (Lusardi & Tufano, 2015). Investigations examining the efficiency of debt relief programmes and credit counselling services have also been done. Research investigates whether these interventions assist people in settling disputes with lenders, lowering interest rates, and creating manageable repayment schedules (Roll & Moulton, 2019). On the other hand, socioeconomic characteristics including income, employment status, and education level are regularly taken into account in the study when examining how an individual's capacity to manage and pay off debt is influenced. Studies frequently show differences in the effectiveness of debt management strategies across various demographic groups (Dettling & Hsu, 2021).

Additionally, psychological study explores the underlying causes of debt accumulation, including peer pressure, impulsive buying, and financial stress. Understanding these elements can help guide interventions and methods for debt management (Norvilitis et al., 2006). Additionally, academics frequently look at patterns in consumer debt levels and how economic factors like recessions and financial crises influence people's debt-accumulation and debt-repayment habits (Brown et al., 2013). While some studies have looked at the emotional components of debt, there hasn't been much research on how emotions and cognitive processes interact when it comes to managing debt. Further investigation may shed light on the relationship between emotional states like anxiety or optimism and cognitive functions, which in turn affect judgements about debt management.

2.1.1 Debt Management Theories

Personal debt management is a crucial aspect of financial well-being, and several theories can guide individuals in effectively managing their debts. One prominent theory is the Debt Snowball Method, popularized by financial expert Dave Ramsey in the year 2012. This theory suggests that individuals should start by paying off their smallest debts first and making minimum payments on larger debts. As smaller debts are paid off, the momentum builds, providing a psychological boost and motivation to tackle larger debts. One approach to reducing personal debt is to modify your behavior and aim for quick success to build a sense of achievement, according to Ramsey (2012). Another method is the Debt Avalanche

approach, which involves prioritizing the repayment of debts with the highest interest rates, as outlined by McAllister (2018). By following the Debt Avalanche Method, people can lower their overall interest payments over time and potentially save more money in the future. Although it may take longer to see significant progress compared to the Debt Snowball Method, the Debt Avalanche Method is based on solid financial principles that aim to reduce the cost of debt (McAllister, 2018). Some individuals may choose a balanced approach by incorporating aspects of both the Debt Snowball and Debt Avalanche methods to develop a personalized debt repayment plan that fits their financial status and objectives. The key is to consistently make payments and avoid accumulating new debt while following a strategy that aligns with one's values and priorities (O'Brien et al., 2021).

In addition, in 2008, Richard Thaler and Cass Sunstein introduced the "Nudge Theory" from the perspective of behavioural economics. It implies that individuals can be gently guided towards wiser debt management options by making little adjustments to the choice architecture, such as automating debt payments or clearly outlining interest rates (Abdul Jamal, 2022). Additionally, according to Thaler and Sunstein's (2008) explanation of behavioural economics theory, it is critical to develop a debt management strategy that takes into account an individual's behavioural characteristics. According to this theory, individuals who want to stick to their debt repayment programmes can benefit from automatic payments, defining specific financial objectives, and applying positive reinforcement. By understanding one's behaviours and tendencies, individuals can design a personalized debt management strategy that is more likely to succeed. Thaler and Sunstein (2008) highlight the importance of designing a debt management plan that fits an individual's behavioural tendencies, according to behavioural economics theory. This theory suggests that people can benefit from automatic payments, setting clear financial goals, and using positive reinforcement to stay on track with their debt repayment plans. By understanding one's behaviours and tendencies, individuals can design a personalized debt management strategy that is more likely to succeed.

2.2 Cognitive and Debt Management

The challenges of debt management for consumers are psychological, not just financial (Ong et al., 2019). This is because debt, like money, is not considered fungible. People do not think about their personal finances in a consolidated way, they think narrowly about the profits and losses of separate mental accounts that consume cognitive bandwidth. This is especially true for consumers' mortgages, car loans, utilities, and other debts. As mentioned by Amar et al. (2011), a consumer may have great difficulty improving their situation simply because the mental accounting of debt creates cognitive stress, causing a bandwidth tax that impairs cognitive functioning. Additionally, the psychological pain caused by multiple debt mental accounts may explain why chronic debt is often associated with stress and negative effects. Furthermore, few consumers can pay with store credit or borrowing from informal lenders, creating a new debt account, and increasing cognitive load. Unexpected expenses are painful for consumers and can leave them with chronic debt (Ong et al., 2019). If the mental accounting of debt creates a bandwidth tax, initiatives to streamline debt would significantly improve cognitive and psychological functioning and reduce harmful behaviours. On the other hand, Chak et al. (2022) found that debt payments are less due to lower cognitive and psychological costs of making assisted choices.

Research on cognitive and debt management has made significant strides in understanding how individuals' cognitive processes influence their financial decisions. Cognitive processes play a pivotal role in individuals' debt management behaviours (Hamid & Loke, 2021). Several cognitive factors influence how individuals accumulate, manage, and repay debt. These cognitive processes include decision-making biases, financial literacy, self-control, and emotional regulation. Research on cognitive biases affecting financial decision-making, more in-depth exploration is needed into how these biases specifically impact debt management. Studies could delve into how confirmation bias, loss aversion, or present bias affect individuals' choices regarding debt accumulation, repayment strategies, and financial planning (Greenberg & Hershfield, 2013).

Cognitive biases, such as confirmation bias, anchoring, and over-optimism, can lead individuals to make suboptimal financial decisions related to debt (DellaValle, 2019). For example, over-optimism bias might cause individuals to underestimate the risks associated with taking on additional debt. Apart from that cognitive processes such as self-control and impulse control can impact debt management (Mahdzan et al., 2020). A lack of self-control may lead to impulsive spending and increased debt accumulation, while better self-regulation can support disciplined debt repayment. Furthermore, people often use cognitive shortcuts,

or heuristics, to simplify financial decisions. These mental shortcuts can influence debt management behaviours, such as when individuals mentally separate "good" and "bad" debt or rely on rule-of-thumb strategies (Lamas & Murphy, 2021). Thus, from the findings, Hypothesis 1 is as follows:

H₁: There is a significant relationship between cognitive and consumer debt management.

2.3 Emotional and Debt Management

Emotions have a major impact on how people manage their debts, affecting different aspects of their financial behaviours and decisions. The relationship between emotional factors and debt management can be complex and varied, as financial stress and anxiety usually come with high levels of debt. These unfavourable emotions can hinder one's ability to make sound decisions, resulting in impulsive or irrational choices concerning debt (Lea, 2021). Moreover, people are more emotionally affected when they are facing a life-changing event and therefore run a higher risk of making poor financial decisions (Fei et al., 2020).

Rendall et al. (2021) distinguishes between two types of emotions. The first, expected emotions were examined above, while the second, immediate emotions, represent genuine affective responses that can, in turn, be divided into three types: integral, incidental, and task related. Emotion and debt are related as Rendall et al. (2021) mentioned that the mental health effects of debt, seem like investing, the choice of whether to take on debt, how much; and how to prepare for repayments and react to them is largely influenced by emotions and personality, not just a cognitive process. Cluster and Stephen (2019), highlighted that the consequences of unpaid debts are large as they impact both financial and emotional well-being, at societal as well as at the individual level. They found that the negative emotions which are anxiety and unhappiness emotions are not associated with consumer debt management. Additionally, individuals who find themselves in significant debt may experience feelings of guilt and shame. These emotions can hinder proactive debt management and disclosure, as individuals may be reluctant to seek help or admit their financial situation (Guérin & Kumar, 2020).

However, it's important to note that being overconfidence can also have an impact on managing debt. Some people may think they can handle more debt than they actually can, which can lead to financial difficulties (Cwynar et al., 2020). On the other hand, having a positive outlook and feeling motivated can help with debt management. When people are motivated to pay off debt and stay optimistic, they are more likely to make smart financial decisions (Sabri et al., 2020). Understanding the emotional aspects of managing debt is crucial for individuals and financial advisors alike. Sabri et al. (2020) also focus on emotional well-being, like stress management techniques, financial therapy, and emotional regulation skills, can complement traditional debt management strategies. Given the various arguments about how negative and positive emotions affect debt management, this study can develop Hypothesis 2 as follows:

H₂: There is a significant relationship between emotional and consumer debt management.

2.4 Behavioural and Debt Management

Managing and navigating debt effectively involves various behavioural factors. The interaction between debt management and behavioural tendencies is complex and includes procrastination, impulsivity, budgeting, debt repayment, debt accumulation, financial planning, motivation, and persistence. Procrastination can hinder debt repayment efforts, resulting in increased interest costs and financial stress (Barboni et al., 2022). On the other hand, impulsivity can lead to impulsive spending and high-interest debt accumulation, making it difficult to make well-informed financial decisions regarding debt (Maria & Tatiana, 2018). To manage debt effectively, it is essential to have effective budgeting and financial planning behaviours. Consistent budgeting and financial planning can help allocate resources toward debt reduction (Zhang & Sussman, 2017).

When it comes to making decisions about debt, our biases can play a big role. Loss aversion and present bias are two examples of these biases that can affect our choices. To effectively manage debt, it's important to understand these behavioural factors and how they impact our decisions (Xiao & Porto, 2019). Motivation and persistence are also key factors in successfully managing debt. Those who are motivated and persistent are more likely to stick to their repayment plans and achieve their financial goals (Ong et al. 2019). For debt management counsellors and individuals looking to improve their financial situation, understanding, and addressing these behavioural factors is crucial. By working to overcome procrastination and impulsivity and promoting positive behaviour changes, we can improve our debt management outcomes (Maria & Tatiana, 2018).

According to Callender and Mason (2017), the behavioural includes all explicit behaviours toward credit. It incurred two important elements which are money management and mental accounting. Money management skill refers to the management of financial resources such as planning, budgeting and savings. Money management skills are found to be one of the significant psychological variables associated with the level of debt (Ranyard et al., 2017). Xiao and O’Neill (2018) developed mental accounting concepts and proposed a dual mental account model of how consumers perceive and evaluate instalment credit. Behavioural factors such as hyperbolic discounting, overconfidence, and/or emotional response may influence borrowing behaviour in the culture of buy now- pay later (Brown, 2019). Additionally, the negative aspects of human disposition such as laziness, carelessness, or inability to engage in delayed gratification and managing borrowing may also be subject to consumer behavioural traits such as debt.

Apart from that there are some employees who are obsessed with living a certain kind of lifestyle and displaying and maintaining a status attached to them irrespective of their financial difficulties (Kamakia et al., 2017). However, competent behaviour is a good indicator for individuals to reimburse their loans to avoid indebtedness (Ghazali et al., 2022). They will be to pay off credit cards at the end of each month, never miss a payment, reimburse the total amount on time, and understand the link between payment performance and credit history. As studied Hidayat and Faturohman (2022) found that behavioural (attitude, behaviour, and financial knowledge) towards debt has a positive relationship with consumer credit usage. These findings lead to the following hypothesis:

H₃: There is a significant relationship between behavioural and consumer debt management.

In relation to the above discussions, Figure 1 shows the theoretical framework of the study.

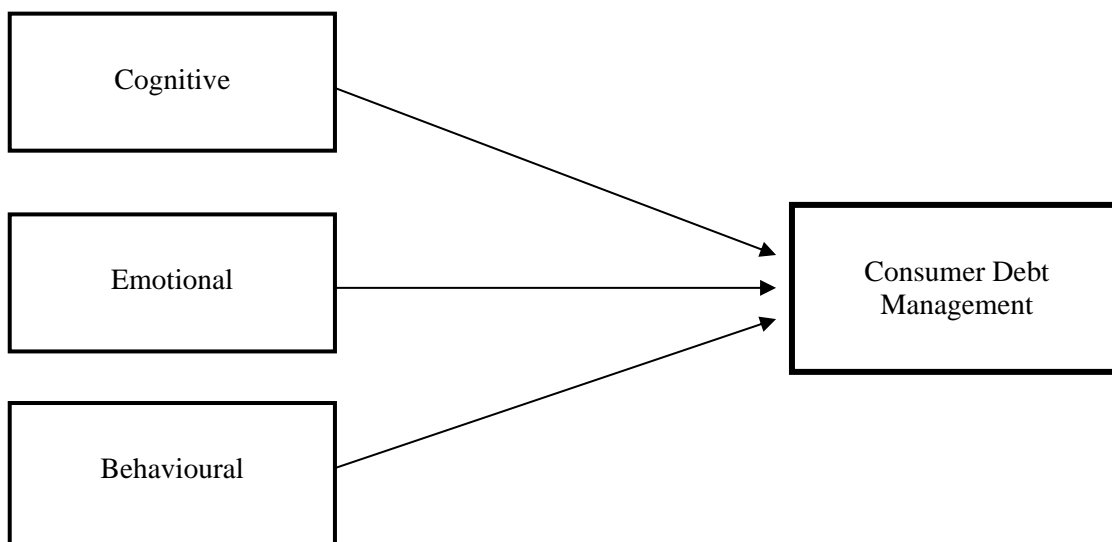


Figure 1: Theoretical Framework

The theoretical framework of this research will show three independent variables namely cognitive (Ong et al., 2019), emotional (Rendall et al., 2021); and behavioural (Brown, 2019) and consumer debt management (Olson & Rick, 2018) as a dependent variable.

3.0 RESEARCH METHODOLOGY

A descriptive study is applied to this study as it aims to describe the dimensions that influence debt management without manipulating or altering them in any way. It is also can answer the outlined research objective and hypotheses development. The multiple variables that categorised as independent variables (cognitive, emotional, and behavioural) and dependent variable (debt management) simultaneously in this study. The target population is individuals who are employees from the government sector in Kelantan. They should have experienced using debt for their spending, purchasing assets, and investing activities. Mostly, researchers explore debt management research among youth (Kautsar & Asandimitra, 2019; Bakar & Bakar, 2020; Alshebami & Aldhyani, 2022), households (Abdullah et al., 2019; Kurowski, 2021; Pavot

& Valenta, 2021) and entrepreneurs (Junoh et al., 2019; Khan et al., 2020; Passo et al., 2022), but rarely focus on employees. Evidently, in Malaysia, the total number of employees who are bankrupt is 42.6% from the year 2019 – 2022 (Department of Insolvency, 2023). Apart from that Kelantan state is showing an increase number of bankruptcy registered cases, from 253 cases in 2021 to 303 cases in 2022.

The data collection method used a questionnaire distributed to ten government employees in Kelantan. The questionnaire is measured using the Likert Scale with a scale of “1” (strongly disagree) to “5” (strongly agree). The researcher designed the questionnaire by using dual languages which are English and Malay. The first section consists of personal data and demographic profiles of respondents such as gender, age of respondents, marital status, position, monthly income, and education level. The second section consists of 18 questions such as consumer debt management (5 items), cognitive (5 items), emotional (4 items) and behavioural (4 items). The items of these constructs are adapted from Olson and Rick (2018), Ong et al. (2019), Rendall et al. (2021) and Brown (2019) respectively. The outlined hypotheses testing is based on debt management theories and previous research related to debt management, cognitive, emotional, and behavioural. The researcher has used stratified sampling where the list of employees is gathered from the Human Resources department for each of the government organizations in Kelantan. The questionnaires were equally distributed to ten government organizations. The researcher gathered the data and information from the employees in the government organizations conveniently accessible to them. This study involves 100 respondents from employees in ten government organizations from different positions.

The data was analysed using the Statistical Package for Social Science (SPSS) 25.0. The data were analysed through frequency distribution analysis, reliability analysis, and coefficient analysis. The frequency distribution measured the frequency and percentage of demographic profile for each item. Whereas, reliability analysis measures the consistency and stability of data (Sekaran & Bougie, 2013). The items of the questionnaire have been tested for reliability to ensure the stability and strength of the questions asked. In general, excellent reliability is considered if the reliability coefficient is above 0.90, those in the range of 0.80 are good, those in the range of 0.60 are acceptable, those less than 0.60 are questionable and less than 0.50 are considered poor (Koonce & Kelly, 2014). The coefficient analysis develops the model of debt management based on beta value whereas t-value is used to measure the relationship between independent variables and dependent variables. Thus, hypotheses are tested using the significance value to examine the relationship between cognitive, emotional, and behavioural, and consumer debt management. The hypothesis is considered as significant relationship when the alpha (α) value is less than 0.05.

4.0 RESULTS AND DISCUSSIONS

The results from the data analysis are discussed based on frequency distribution, reliability, and coefficient. The results of frequency distributions are shown below:

Table 1: Frequency Distribution Results

Items	Frequency (N = 100)	Percentage
Gender		
Male	48	48.0
Female	52	52.0
Age		
18 - 29 years	18	18.0
30 - 39 years	37	37.0
40 - 49 years	17	17.0
50 years and above	28	28.0
Marital Status		
Single	12	12.0
Married	87	87.0
Divorced	1	1.0
Position		
Top Management & Professional	4	4.0
Executive	22	22.0

Clerk	74	74.0
Monthly Income		
RM1500 – RM2000	37	37.0
RM2001 – RM3000	33	33.0
RM3001 – RM4000	21	21.0
RM4001 – RM5000	6	6.0
> RM5000	3	3.0
Education Level		
SPM / STPM	54	54.0
Diploma	32	32.0
Bachelor's Degree	12	12.0
Master's Degree	2	2.0

Table 1 shows the frequency analysis for the sample characteristics. The sample consists of 48 (48.0 percent) males and 52 (52.0 percent) females with most ages ranging from 30 to 39 years (n = 37, 37.0 percent). There were 28 (28.0 percent) aged 50 years and above, 18 (18.0 percent) aged from 18 to 29 years, and lastly 17 (17.0 percent) between 40 to 49 years. Most of the respondents are married status (87.0 percent). For the employees' position, 74.0 percent of the respondents are clerks, 22.0 percent are executives and only 4 respondents (4.0 percent of respondents are top management and professional position. The majority of employees have an income ranging from RM1500 to RM2,000 which is 37.0 percent. It followed by 33.0 percent income ranging from RM2001 – RM3000 and only 3.0 percent of respondents have income above than RM5,000. For education level, 54.0 percent of the respondents have SPM / STPM, 32.0 percent have a diploma, 12.0 percent have a bachelor's degree and only 2.0 percent respondents have a master's degree.

Table 2: Reliability Results

Variables	Number of items	Cronbach's Alpha
Cognitive	5	0.601
Emotional	4	0.821
Behavioural	4	0.810
Consumer Debt Management	5	0.759

Table 2 shows Cronbach's alpha values for cognitive, emotional, behavioural and consumer debt management variables. It is observed that the Cronbach's alpha values for all the factors exceeded 0.6 (>0.6), which indicates that all the items are reliable and consistent for their corresponding factor. Such a high figure (very close to the maximum value of 1) which is emotional and behavioural indicates that both items are good indicators of what is being measured.

Table 3: Coefficient Results

Model	B	Beta	T	Sig.
(Constant)	2.135		2.519	0.013
<i>Cognitive</i>	0.270	0.190	1.822	0.072
<i>Emotional</i>	-0.215	-0.140	-1.164	0.247
<i>Behavioral</i>	0.397	0.246	1.991	0.049

The coefficient result is shown in Table 3. The beta value of cognitive shows that $\beta_1 = 0.270$ indicating that for every unit increase in consumer debt management, it will increase 0.270 cognitive of the employees. For the emotional, $\beta_2 = -0.215$ indicates that for every unit increase in consumer debt management, the emotions of employees will decrease by 0.215. For the behavioural, $\beta_3 = 0.397$ indicates that for every unit increase in consumer debt management, the behavioural will increase by 0.397.

Thus, the equation model of consumer debt management is as follows:

$$\text{Consumer Debt Management} = 2.135 + 0.27 \text{ Cognitive} - 0.215 \text{ Emotional} + 0.397 \text{ Behavioural}$$

The hypothesis testing shows that cognitive and emotional have no significant relationship with consumer debt management. This is due to the alpha values being more than 0.05 which are 0.072 and 0.247 respectively. Only behavioural factor has a significant relationship with consumer debt management where the alpha value is 0.049. A summary of the hypothesis results is shown in Table 4.

Table 4: Summary of Hypothesis Result

	Hypothesis Statement	Results
H₁	There is a significant relationship between cognitive and consumer debt management	<i>Not Significant</i>
H₂	There is a significant relationship between emotional and consumer debt management	<i>Not Significant</i>
H₃	There is a significant relationship between behavioural and consumer debt management	<i>Significant</i>

Hypothesis 3 shows that the relationship between behavioural and consumer debt management is significant. Evidently, Hidayat and Faturohman (2022) found that when the behavioural (attitude) towards debt increases, consumers are more using credit cards or credit instalments. The result is also in line with Ghazali et al. (2022) which that competent behaviour among government employees led to good debt management. While incompetent behaviour among government employees led to bad debt management. Moreover, it is proved that when employees are in procrastinate, it can cause delays in debt repayment efforts (Barboni et al., 2022). Furthermore, Maria & Tatiana (2018) stressed that impulsivity behaviour leads to impulsive buying and employees facing difficulty with high debt accumulation.

Meanwhile, Hypothesis 1 shows there is no significant relationship between cognitive and consumer debt management. The result of Hypothesis 1 parallels Ong et al. (2019), because people do not think about their personal finances in a consolidated way, they think narrowly about the gains and losses of separate mental accounts that consume cognitive bandwidth. It means that the government employees have not thinking seriously about debt management as they earned and secured income every month. However, the result is not in line with Ong et al. (2019) as debt management can become better if the consumers would significantly improve their cognitive and psychological functioning and reduce harmful behaviours. The findings from Chak et al. (2022) are also not parallel with the result in this study has found that a positive relationship exists when the debt payments are less due to lower cognitive of make assisted choices.

Lastly, Hypothesis 2 shows no significant relationship between emotional and consumer debt management. It is in line with Custer and Stephen (2019) as negative emotion is not associated with consumer debt management. It means that the emotions of government employees are not associated with their debt management. The emotions do not influence government employees to choose whether to take debt or not, how much debt; and how to prepare for repayments and react to them. However, it is contrasted with Rendall et al. (2021) as emotion and debt management are related.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study is to examine the relationship between cognitive, emotional and behavioural, and consumer debt management among government employees. The findings indicate that only behavioural significantly related to consumer debt management. However, the other two variables which are cognitive and emotional are insignificantly related to consumer debt management. Good debt management will improve government employees' behavioural as competent behaviour will lead them to pay off their debts at the end of each month, never miss a payment, reimburse the total amount on time and understand the link between payment performance and credit history. Good debt management improves the behaviour of government employees because competent behaviour makes them pay their debts every month, never miss a payment, pay the total amount on time and understand the relationship between solvency and credit history. Conversely, government employees do not seriously think of their debt as they are securely receiving monthly salaries. They are also not emotional when making a decision to do financing.

On the other hand, for theoretical implications, this study gives additional literature to future researchers to explore more on debt management. Practically, this study gives implications for the government organization to provide personal financial planning to the employees that can reduce the indebtedness. Apart from that consumers also need to improve their skills in managing debt to avoid default payments which lead to bankruptcy.

Further research needs to explore the role of culture and socioeconomic status in shaping cognitive processes related to debt management. Research should investigate how cultural norms and socioeconomic factors influence individuals' cognitive approaches to debt, which could lead to tailored interventions for diverse populations. In the era of technology, research should explore the impact of FinTech applications, such as budgeting apps and AI-driven financial advice, on individuals' cognitive decision-making processes and their debt management outcomes.

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REFERENCES

- Abdul Jamal, A. A. (2022). *Nudging Financial Literacy, Attitudes and Behaviours among Low Self-Control Young Adults: A Randomized Controlled Trial*. Doctoral dissertation, University of Birmingham.
- Abdullah, N., Fazli, S. M., & Muhammad Arif, A. M. (2019). The Relationship between Attitude towards Money, Financial Literacy and Debt Management with Young Worker's Financial Well-being. *Pertanika Journal of Social Sciences & Humanities*, 27(1).
- Achtziger, A. (2022). Overspending, debt, and poverty. *Current opinion in psychology*, 46, 101342.
- Alshebami, A. S., & Aldhyani, T. H. (2022). The interplay of social influence, financial literacy, and saving behaviour among Saudi youth and the moderating effect of self-control. *Sustainability*, 14(14), 8780.
- Alwi, M. A. M., Abdullah, A., & Luqman, A. (2023). Pengurusan Hutang Kad Kredit–Sorotan Literatur Bersistematik daripada 2010-2020 (Credit Card Debt Management–Systematic Literature Review from 2010-2020). *UMRAN-International Journal of Islamic and Civilizational Studies*, 10(1), 17-34.
- Amar, M., Ariely, D., Ayal, S., Cryder, C. E., & Rick, S. I. (2011). Winning the battle but losing the war: The psychology of debt management. *Journal of Marketing Research*, 48(SPL), S38-S50.
- Amit, N., Ismail, R., Zumrah, A. R., Mohd Nizah, M. A., Tengku Muda, T. E. A., Tat Meng, E. C., ... Che Din, N. (2020). Relationship Between Debt and Depression, Anxiety, Stress, or Suicide Ideation in Asia: A Systematic Review. *Frontiers in Psychology*, 11(July). <https://doi.org/10.3389/fpsyg.2020.01336>
- Ansar, R., Karim, M. R. A., Osman, Z., & Fahmi, M. S. (2019). The Impacts of Future Orientation and Financial Literacy on Personal Financial Management Practices among Generation Y in Malaysia: The Moderating Role of Gender. *Asian Journal of Economics, Business and Accounting*, 12(1), 1–10. <https://doi.org/10.9734/ajeba/2019/v12i130139>
- Bakar, M. Z. A., & Bakar, S. A. (2020). Prudent financial management practices among Malaysian youth: The moderating roles of financial education. *The Journal of Asian Finance, Economics and Business (JAFEB)*, 7(6), 525-535.
- Barboni, G., Cárdenas, J. C., & de Roux, N. (2022). Behavioral messages and debt repayment. *Documento CEDE*, (22).
- Brown, M., Haughwout, A., Lee, D., & Van der Klaauw, W. (2013). The financial crisis at the kitchen table: trends in household debt and credit. *Current Issues in Economics and Finance*, 19(2).
- Brown, S. (2019). Un-boxing vulnerability in protection of the credit consumer. *Journal of Business Law*, 2019(7), 511-533.

- Callender, C., & Mason, G. (2017). Does student loan debt deter higher education participation? New evidence from England. *The ANNALS of the American Academy of Political and Social Science*, 671(1), 20-48.
- Chak, I., Croxson, K., D'Acunto, F., Reuter, J., Rossi, A. G., & Shaw, J. M. (2022). *Improving Household Debt Management with Robo-Advice* (No. w30616). National Bureau of Economic Research.
- Custers, A., & Stephen, A. T. (2019). Message not received? The effects of creditor messaging and pressure on consumer debt management. *The Effects of Creditor Messaging and Pressure on Consumer Debt Management (January 1, 2019)*. Saïd Business School WP, 1.
- Cwynar, A., Cwynar, W., Patena, W., & Sibanda, W. (2020). Young adults' financial literacy and overconfidence bias in debt markets. *International Journal of Business Performance Management*, 21(1-2), 95-113.
- Dackehag, M., Ellegård, L.-M., Gerdtham, U.-G., & Nilsson, T. (2019). Debt and mental health: new insights about the relationship and the importance of the measure of mental health. *European Journal of Public Health*, 29(3), 488–493. <https://doi.org/10.1093/eurpub/ckz002>
- Daud, S. N. M., Marzuki, A., Ahmad, N., & Kefeli, Z. (2019). Financial Vulnerability and Its Determinants: Survey Evidence from Malaysian Households. *Emerging Markets Finance and Trade*, 55(9), 1991–2003. <https://doi.org/10.1080/1540496X.2018.1511421>
- DellaValle, N. (2019). People's decisions matter: understanding and addressing energy poverty with behavioral economics. *Energy and Buildings*, 204, 109515.
- Dettling, L. J., & Hsu, J. W. (2021). Minimum Wages and Consumer Credit: Effects on Access and Borrowing. *The Review of Financial Studies*, 34(5), 2549-2579.
- Durkin, T. A., & Elliehausen, G. E. (2006). *Financial Economics of Information Disclosure: Applications of Truth-in-lending*. Oxford University Press.
- Fei, C. K., Sabri, M. F., Mohamed, N. A., Wijekoon, R., & Majid, A. Z. A. (2020). Determinants of financial vulnerability among young employees in Malaysia. *Journal of Critical Reviews*, 7(15), 3097-3107.
- Gathergood, J. (2012). Self-control, financial literacy and consumer over-indebtedness. *Journal of economic psychology*, 33(3), 590-602.
- Greenberg, A. E., & Hershfield, H. E. (2019). Financial decision making. *Consumer Psychology Review*, 2(1), 17-29.
- Greenberg, A. E., & Mogilner, C. (2021). Consumer debt and satisfaction in life. *Journal of Experimental Psychology: Applied*, 27(1), 57.
- Guérin, I., & Kumar, S. (2020). Unpayable debt: Debt, gender, and sex in financialized India. *American Ethnologist*, 47(3), 219-233.
- Hamid, F. S., & Loke, Y. J. (2021). Financial literacy, money management skill and credit card repayments. *International Journal of Consumer Studies*, 45(2), 235-247.
- Hauff, J. C., Carlander, A., Gärling, T., & Nicolini, G. (2020). Retirement Financial Behaviour: How Important Is Being Financially Literate? *Journal of Consumer Policy*, 43(3), 543–564. <https://doi.org/10.1007/s10603-019-09444-x>
- Hidayat, J. C., & Faturohman, T. (2022). Personality Traits' Impact on Managing Debt: A Case Study in Indonesia. *Review of Integrative Business and Economics Research*, 11, 116-129.
- Junoh, M. Z. B. H., Hidhiir, M. M. H. B., & Basheer, M. F. (2019). Entrepreneurial financial practices in Pakistan: The role of access to finance and financial literacy. *International Journal of Innovation, Creativity and Change*, 7(9), 210-231.
- Kautsar, A., & Asandimitra, N. (2019). Financial Knowledge as Youth Preneur Success Factor. *Journal of Social and Development Sciences*, 10(2 (S)), 26-32.
- Khan, K. A., Dankiewicz, R., Kliuchnikava, Y., & Oláh, J. (2020). How do entrepreneurs feel bankruptcy?. *International Journal of Entrepreneurial Knowledge*, 8(1), 89-101.
- Klapper, L., & Lusardi, A. (2020). Financial literacy and financial resilience: Evidence from around the world. *Financial Management*, 49(3), 589–614. <https://doi.org/10.1111/fima.12283>
- Koonce, G. L., & Kelly, M. D. (2014). Analysis of the Reliability and Validity of a Mentor's Assessment for Principal Internships. *Education Leadership Review*, 15(2), 33-48.
- Kurowski, Ł. (2021). Household's overindebtedness during the COVID-19 crisis: The role of debt and financial literacy. *Risks*, 9(4), 62.

- Lamas, S., & Murphy, R. O. (2021). Simple Decision-Making Rules of Thumb and Financial Well-Being. *Journal of Personal Finance*, 20(2).
- Lea, S. E. (2021). Debt and overindebtedness: Psychological evidence and its policy implications. *Social Issues and Policy Review*, 15(1), 146-179.
- Limbu, Y. B., & Sato, S. (2019). Credit card literacy and financial well-being of college students: A moderated mediation model of self-efficacy and credit card number. *International Journal of Bank Marketing*, 37(4), 991–1003. <https://doi.org/10.1108/IJBM-04-2018-0082>.
- Lusardi, A., & Tufano, P. (2015). Debt literacy, financial experiences, and overindebtedness. *Journal of Pension Economics & Finance*, 14(4), 332-368.
- Mahdzan, N. S. A., Abd Sukor, M. E., Ismail, I., & Rahman, M. (2020). *Consumer Financial Vulnerabilities in Malaysia: Issues, Trends and Psychological Aspects*. Routledge.
- Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science*, 341(6149), 976-980.
- Maria, G., & Tatiana, G. (2018). Psychological factors of multiple debt repayment strategies. *Review of Business and Economics Studies*, (3), 57-64.
- McAllister, E. (2018). A snowball's chance: Debt snowball vs. debt avalanche.
- Narain, R. S. (2022). Good credit management's Impact: How does it contribute to material effectiveness and possibility in business. *Materials Today: Proceedings*, 63, 376-381.
- Norvilitis, J. M., Merwin, M. M., Osberg, T. M., Roehling, P. V., Young, P., & Kamas, M. M. (2006). Personality factors, money attitudes, financial knowledge, and credit-card debt in college students 1. *Journal of applied social psychology*, 36(6), 1395-1413.
- O'Brien, L., Chen, V., Ramsay, I., & Ali, P. (2021). An Impending'Avalanche': Debt Collection and Consumer Harm after COVID-19. *Australian Business Law Review*, 49(2), 84-115.
- Olson, J., & Rick, S. (2018). Managing debt and managing each other: The interpersonal dynamics of joint financial decisions. Available at SSRN 2637637.
- Ong, Q., Theseira, W., & Ng, I. Y. (2019). Reducing debt improves psychological functioning and changes decision-making in the poor. *Proceedings of the National Academy of Sciences*, 116(15), 7244-7249.
- Paaso, M., Pursiainen, V., & Torstila, S. (2022). Entrepreneur debt aversion and financing decisions: Evidence from COVID-19 support programs. In *Proceedings of Paris December 2021 Finance Meeting EUROFIDAI-ESSEC*.
- Pavot, J., & Valenta, V. (2021). The role of households in financing government debt in euro area. *Economic Bulletin Articles*, 3.
- Ramsey, D. (2012). *Dave Ramsey's complete guide to money*. Ramsey Press.
- Ranyard, R., Mchugh, S., & McNair, S. (2017). The psychology of borrowing and over-indebtedness. *Economic psychology*, 222-238.
- Rendall, S., Brooks, C., & Hillenbrand, C. (2021). The impacts of emotions and personality on borrowers' abilities to manage their debts. *International Review of Financial Analysis*, 74, 101703.
- Rivlin, G. (2013). The long shadow of bad credit in a job search. *New York Times*, May, 11.
- Roll, S., & Moulton, S. (2019). Credit counseling and consumer credit trajectories. *Economic Inquiry*, 57(4), 1981-1996.
- Sabri, M., Wijekoon, R., & Rahim, H. (2020). The influence of money attitude, financial practices, self-efficacy and emotion coping on employees' financial well-being. *Management Science Letters*, 10(4), 889-900.
- Sekaran, U., & Bougie, R. (2016). *Research methods for business: A skill building approach*. John Wiley & Sons.
- Sweet, E., Nandi, A., Adam, E. K., & McDade, T. W. (2013). The high price of debt: Household financial debt and its impact on mental and physical health. *Social science & medicine*, 91, 94-100.
- Turunen, E., & Hiilamo, H. (2014). Health effects of indebtedness: a systematic review. *BMC Public Health*, 14(1), 489. <https://doi.org/10.1186/1471-2458-14-489>
- Xiao, J. J., & Porto, N. (2019). Present bias and financial behavior. *Financial Planning Review*, 2(2), e1048.
- Zhang, C. Y., & Sussman, A. B. (2017). The role of mental accounting in household spending and investing decisions. *Client Psychology. New York: Wiley, Chicago Booth Research Paper*, (19-07)