

The effect of financial stress on depression symptoms among working adults in Malaysia



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ABSTRACT

Article History

Received: 5 March 2024

Revised: 8 May 2024

Accepted: 21 May 2024

Published: 10 June 2024

Keywords

Depression symptoms
Financial stress
Life stressors
Malaysia
Mental health
Working adults.

Financial stress is common life difficulty that helps people become more resilient and motivated to effectively accomplish their financial goals. However, excessive financial stress can harm well-being, potentially leading to depression symptoms. Thus, this study aims to explore how financial stress impacts depression symptoms in Malaysian working adults. A total of 210 respondents had participated voluntarily in this research. This study used quantitative research methods, including correlational and cross-sectional designs. It measured financial stress using the Affective, Physical, Relational (APR) Financial Stress Scale (24 items) as the independent variable and assessed depression symptoms with the Patient Health Questionnaire (PHQ-9) as the dependent variable. SPSS analysis of the data shows a moderate level of financial stress. Additionally, affective reactions, interpersonal behavior, and physiological responses related to financial stress significantly contribute to depression symptoms in working adults in Malaysia. The results highlight how crucial it is for Malaysian working individuals to manage their financial stress in order to lessen the symptoms of depression. It is advised that more thought and investigation be done.

Contribution/ Originality: Malaysia lacks research on the relationship between financial stress and depression. Frequently, researchers overlook fully examining the link in favor of concentrating on a single component. Thus, this research is essential to comprehending how financial stress impacts mental health and can result in depression and other illnesses.

1. INTRODUCTION

Stress is an individual's response to a wide variety of stimuli (objects or events) that occur in life, and it could appear to be chronic, acute, or toxic (Lynch et al., 2022). Stress may occur in one's life as a result of potential stressors or stimuli such as relationships at work, financial compensation, workload, role stress, job control, demand, and insecurity (Ekawarna, 2019; S. Muhammad Khir, Mahmud, & Mohamad Farok, 2022; Noor, 2016). This study focuses on financial stress, in which the stress occurring in one's life is due to financial matters. As financial stressors can vary, it is important to include Malaysia's economic status among the determinants due to the working adults' responsibilities and commitments in their lives living in Malaysia. Chong and Khong (2018) state an estimated range of RM2700 as an individual's living wage in Kuala Lumpur, in which 'living wage' refers to

sustaining a socially acceptable minimum standard of living, but only up to 27% of households were earning below the estimated living wage, and 70% of it is are the one-employed household member. This shows that the high gap has significantly affected individuals, especially working adults, in many aspects including financial, and health problems such as physical illness or psychological distress. In addition, the recent COVID-19 pandemic outbreak has also significantly affected numerous countries in the world economically, and there is no doubt many parties are struggling to improve or sustain their financial stability, especially the working adults in Malaysia who have been battling with income inequality and gaps beforehand. High numbers of working adults were also getting laid off by companies or salaries cut off due to economic recession (Kaur, 2021). This results in some individuals becoming more financially stressed and affecting their mental health, as they have lost their income security.

According to Guan, Guariglia, Moore, Xu, and Al-Janabi (2022) financial stress is represented as one of the economic determinants of depression. Depression is one of the rising psychological disorders in the world which has cause for concern, given the rising incidence of mental health issues among people globally (Syazwina Muhammad Khir et al., 2024). As time passes, depression has become more common among the public. Depression is clinically diagnosed when the individual portrays at least 2 weeks continuously of several symptoms such as persistent negative emotions, high irritability, worthlessness, prolonged fatigue, insomnia, suicidal thoughts, abrupt changes in diet, low psychomotor activity, and loss of pleasure (American Psychiatric Association, 2020). According to the National Health and Morbidity Survey (2019) in Malaysia, 2.5% of the adult population, roughly around 500,000 Malaysian adults are clinically diagnosed with depression, and it occurs more in females than males, geographically often found in rural than urban areas, and economically found the most in the B40 group of income classification. Moreover, a study among adults in Malaysia found that 48.1% of the study sample suffered from mild to extremely severe stress, anxiety, and depression (S. Muhammad Khir, Wan Mohd Yunus, Mahmud, & Mohd Arif, 2020). In addition, Dr. Zaliha Mustafa through CodeBlue (2023) mentions that in the Federal Territories, Malaysia has the highest rate of depression and anxiety, with a 'high cost of living' as among the factors. Thus, this strengthens the fact that financial stress is highly associated with increased chances of depression. Moreover, Shields-Zeeman and Smit (2022) elaborate that the effect of income loss or increased cost of living is more detrimental to mental health than an increase in income is. This means that these matters may carry significant impacts of substantial risk to income security and psychological health, especially for working adults living in middle- or lower-income classifications. Conclusively, this study works as research in understanding financial stress influencing depression among working adults in this developing country, Malaysia.

1.1. Purpose of the Study

This is correlational research that aims to measure the level of financial stress, and the effect of financial stress (affective reactions, interpersonal behavior, and physiological responses) on depression symptoms among working adults in Malaysia. Therefore, this research delivers a thorough explanation of knowledge and practical contributions for various parties that may benefit from the research, such as the authorities in the health and financial sectors, researchers, and the public – especially younger generations. For instance, this research may contribute to working adults on the importance of maintaining a good balance of financial stress and reducing or avoiding risks of developing depression symptoms.

2. LITERATURE REVIEW

2.1. Financial Stress

In the context of financial stress, it is conceptualized as a psychophysiological response to the perception of imbalance, uncertainty, and risk in the realm of financial resource management and decision-making (Heo, Cho, & Lee, 2020). It describes any financial-related aspects that may act as a stressor for an individual to experience difficulties, situations, and stress, this is called financial stressors. Although financial stress may be experienced by

many people, it is found that financial stress tends to weigh more on low-income individuals and households due to the difficulty of meeting financial needs or the cost of living (Rajendra, 2023). According to Ryu and Fan (2023) financial worries and psychological distress are more pronounced among unemployed individuals as there are fewer protective factors such as employment, income, and assets, compared to working individuals. Due to all the impact of stressors, financial stress may negatively affect one's overall health (Benisek & Nazario, 2022). Prolonged stress will eventually deteriorate mental health such as anxiety and depression, as well as physical health like changes in gut functioning and insomnia (Cox & Gökbayrak, 2022).

Several models and theories are interrelated with the concept of financial stress in this research. One of them is the General Adaptation Syndrome (GAS) model, which was formed by Selye (1946) to describe the full biological response to stress, including financial stress, in three stages – initial alarm/reaction to the stressors, resistance/adaptation to coping, and eventual exhaustion (Ohwovoriolè, 2024). The first stage, which is the initial alarm, indicates the stressors are in contact with homeostasis, causing the autonomous nervous system to increase dramatically. Crevecoeur (2016) states the resistance phase will last longer in duration, maybe by hours, days, months, or years, but regardless of the durations, the body system and alert will return to its pre-activated state and recover from the ordeal once stressors are dealt. The final stage of stress response in GAS is labeled as exhaustion, which is the response of prolonged stress due to the inability to continually resist chronic stressors, giving low chances to recover.

The Diathesis-Stress model is also related to the concept of financial stress, in which, it is a framework that suggests the emergence of mental disorders is due to the existence of diathesis and stress. The term diathesis reflects any factors or dispositions such as biological, sociological, environmental, or physical that have the potential to expose an individual's vulnerability (Sussman & Mcleod, 2023). Stress in the model reflects on the response of vulnerabilities shown by dispositions and could vary by the intensity of diathesis and counteract of protective factors. In this study, financial stress is categorized as the stress response towards vulnerability exposed by the diathesis of a model, in which the diathesis or dispositions are the stressors of financial-related events. A prolonged financial stress may lead to an exhaustion phase as stated in the GAS model, and causes the emergence of mental disorders, including depression.

Conclusively, the concept of financial stress in this research is well-suited to be applied among working adults in Malaysia, since it is also supported by several findings and opinions from past researchers, related theories, and models.

2.2. Depression Symptoms

Depression is a type of clinically diagnosed mental health condition that is more common in current society, and treatable through medications or psychotherapy. Stressful events causing the development of depression are supported by Santomauro et al. (2021) in a study conducted during the COVID-19 pandemic, illustrating an increment of prevalence in females than males for depression during the pandemic as negatively affected by economic activities, loss of livelihood, closures of business, shift of priorities and more. The Diagnostic and Statistical Manual of Mental Disorders states a depression can be clinically diagnosed when there are at least five or more symptoms that have persistently occurred for two weeks consistently – depressing and hopeless moods, significant weight changes and diets, sleep disturbance, psychomotor agitation, fatigue, feeling of worthlessness, poor concentration capacity, and suicidal thoughts (American Psychiatric Association, 2013). As depression may be affected by factors and diagnosed by symptoms, this mental disorder could negatively affect a patient's overall health – physically and psychologically.

In the context of finance, according to a survey conducted by the National Center for Health Statistics in the United States of America from 2013 to 2016, the prevalence of depression is shown lower as household income increases (Brody, Pratt, & Hughes, 2018). Guan et al. (2022) mentions financial stress as a part of the economic

determinant of depression, and generally high relations of depression among populations with low income or wealth. Prolonged financial stress may exhibit symptoms of depression as the affected individuals are gradually worn off to resist or lack opportunities to overcome stressors, as concluded in the General Adaptation Syndrome (GAS) model. Thus, this shows depression may be a result of economic factors, and possess a range of severity on an individual's cognition, emotion, social, and physical health. Several relevant theories related to depression symptoms are the Stress-Vulnerability Model (SVM) and The Chronic Mild Stress (CMS) Model of Depression.

In SVM, it explains three elements related to the development of mental illnesses, which are biological vulnerability, stress, and protective factors. The first element, which is biological vulnerability, is directed to genetic predisposition. According to [Quaedflieg and Smeets \(2013\)](#) genes may have a direct effect on the development of brain systems. Next, stress is related to the occurrence of stressful events that affect pathology development. It indicates any significant life crisis that occurs in one's life may emerge as a symptom of any mental disorder ([Heyl & Block, 2023](#)). Lastly, the protective factors, entail sources in the reduction of stress and biological vulnerability. Individuals who are easily prone to develop symptoms of mental illness ought to boost protective factors as a proactive step in maintaining the stability of mental health. This includes searching for suitable support systems, preferably the ones with strong communication skills to ensure comfortable interactions in between. Conclusively, the stress-vulnerability model indicates that the presence of stress as an external stimulus increases one's vulnerability in coping with such negative events, aside from genetical factors. The uncontrolled vulnerability presence is prone to increase the likelihood of mental illness symptoms, including depression.

Next, the CMS model is initially tested with lab rats in an experiment, to develop a further understanding of human psychopathology, developed in the early 1980s. Initially, lab rats are put into experiments by exposing them to stressors constantly, then are observed for their development in behavioral changes, which may correlate with clinical symptoms of depression. The experimented rats were also rewarded and treated using antidepressant drugs, which functioned to analyze the changing progress and treatment efficacy of the controlled group of rats after being exposed to constant stressors ([Willner, 2017](#)). It further states that the CMS model was developed to experiment with antidepressant strategies and their effectiveness on affected groups of humans, but was first tested on lab rats. In the neurobiological aspect, after constant exposure to stressors, the lab rats began to show extreme decrement of sucrose consumption in the first quarter period of the experiment but gradually increased in the next quarter, and ended up inconsistent at the end of the experiment period. [Markov and Novosadova \(2022\)](#) also claim the effect of constant stressor exposure results in sleep deprivation among lab rats during the experiment. The portrayal of these behavioral changes – irregular appetite and sleep deprivation – are aligned with depressive-like behaviors, or symptomology listed in DSM-5. This explains that constant exposure to stressful stimuli may cause depression symptoms gradually over time ([Markov & Novosadova, 2022](#); [Strekalova et al., 2022](#); [Willner, 2017](#)).

2.3. The Relationship between Financial Stress and Depression Symptoms

A longitudinal study originated from South Africa states individuals with worse economic status suffer worse depression in a span of T1 and T2 ([Lund & Cois, 2018](#)). Overall results display a significant effect of household income at baseline and could predict a worse depression status. [Kader Maideen, Mohd Sidik, Rampal, and Mukhtar \(2014\)](#) include financial constraints as among the depression predictors in the study, stating there is a relevant association between economic hardships and the presence of depression, focused on parents' prevalence in Selangor, Malaysia. The study obtained 10.3% depression prevalence among the adults who participated, with compilations of ten depression predictors including serious financial constraint. The relationship between the variables is also linked with the Diathesis-Stress model, in which diathesis (i.e. factors leading to stress, in this case, financial-related events) affects the stress (i.e. response towards stimulus, in this case, financial stress).

A previous study review conducted by [Guan et al. \(2022\)](#) shows a positive association between financial stress and depression among adults in high-income and low-and-middle-income countries but is more profound among

adult populations in low-income countries. In addition, the authors confirms that due to complex and multidimensional financial stress indicators stated from several previous studies, the results of correlation patterns with depression are prone to appear inconsistent. In the context of income as a financial stress indicator, several studies are taken into consideration. Hounkpatin, Wood, Brown, and Dunn (2015) mention an increment of income per household is statistically related to reduced depression risks, and conclude that the income rank model is more compatible than sole income measurement for the risk of depressive symptoms.

The positive relationship between financial stress and depression symptoms is also reflected in previous research LeMoult (2020) providing a thorough explanation of the mechanism of stressors' presence, human reactivity, and depression. In the research, LeMoult (2020) claims that in the context of stressor exposure, the display of cognitive and biological stress responses are the elements contributing to depression symptoms. Figure 1 explains the mechanism of stressors, human reactivity, and depression.

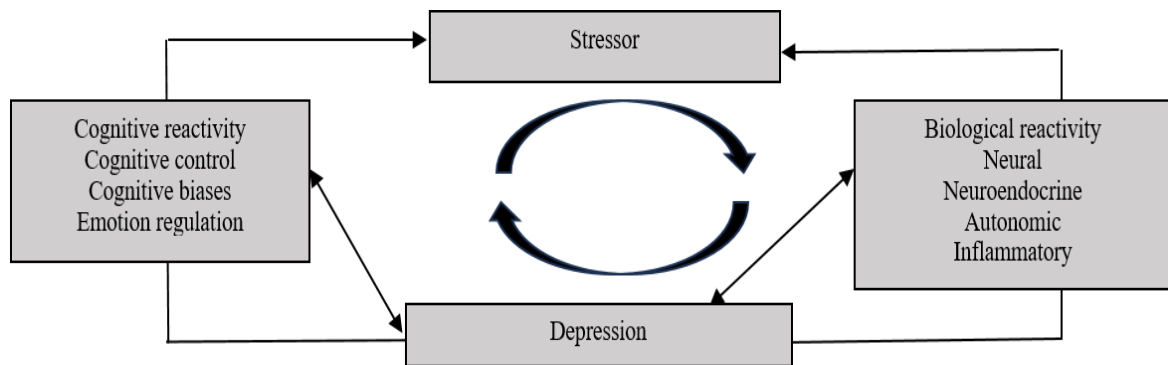


Figure 1. The mechanism of stressors and depression.

Source: LeMoult (2020).

Hypothesis 1: There is a significant positive effect of affective reactions on depression symptoms among working adults in Malaysia.

Hypothesis 2: There is a significant positive effect of interpersonal behavior on depression symptoms among working adults in Malaysia.

Hypothesis 3: There is a significant positive effect of physiological response on depression symptoms among working adults in Malaysia.

3. METHODOLOGY

3.1. Research Design

This research applied a quantitative, correlational, and cross-sectional research design to investigate the effect of financial stress on depression symptoms of working adults in Malaysia. In this research, financial stress (affective reactions, interpersonal behavior, and physiological responses) is identified as the independent variable, meanwhile depression symptoms as its dependent variable. Working adults all over Malaysia have been targeted as this research's population, with the research sample size of 210. As the convenience sampling method is chosen, the research questionnaire is distributed through online platforms such as WhatsApp, Instagram, or Facebook, whereby great accessibility is approached. However, the qualified respondents are not obliged to participate in this research but will be given an appreciation token by the researcher at the end of the questionnaire for those who participated. The distributed questionnaire consisted of three sections – (A) demographic data; (B) financial stress scale; and (C) depression symptoms scale – summing up to 39 items written.

3.2. Research Instrument

Demographic data of respondents are collected in terms of (1) sex, (2) marital status, (3) age, (4) race, (5) main working states or federal territories, and (6) years of working. Then, the independent variable of this research, financial stress, is scaled via the Affective, Physical, R Financial Stress Scale to measure the level of financial stress developed by Heo et al. (2020). This scale is divided into three dimensions – affective, physiological, and relational – represented by 8 items each. It is found that this instrument is practical for measuring the level of financial stress as it shows a great reliability and validity score (Heo et al., 2020). The items are represented in a 5-point Likert scale, between '1 = strongly disagree' and '5 = strongly agree'. The total score of all items is then calculated to determine the level of financial stress, consisting of low ($1.00 < M < 2.33$), moderate ($2.34 < M < 3.67$), and high level ($3.68 < M < 5.00$).

Next, depression symptoms, the dependent variable of this research, are measured using the Patient Health Questionnaire (PHQ-9) developed by Kroenke, Spitzer, and Williams (2001). This instrument is formed by implementing the nine symptoms of depression listed in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) and divided into two dimensions – somatic and cognitive, with each represented by five and four items, respectively. According to Vu et al. (2022) PHQ-9 is practical to utilize as it is a reliable research instrument.

The symptoms included interest in doing things, hopelessness, oversleeping or sleep deprivation, tiredness, appetite, self-esteem, concentrating issues, slow verbal or non-verbal action, and suicidal thoughts. These items must be replied to with respondent reflecting on their behavior over the past two weeks, as recommended by DSM-5 when analyzing any depression symptoms. The replies of each item are represented by a 4-point Likert scale, from '0 = Not at all' to '3 = Nearly every day'. The sum scores will then be calculated and divided into several levels – none-to-minimal ($0.00 < M < 5.40$), minimal ($5.41 < M < 10.81$), minor depression ($10.82 < M < 16.22$), moderate ($16.23 < M < 21.63$), and severe ($21.64 < M < 27.00$).

3.3. Data Analysis

In this research, the Statistical Package for Social Science (SPSS) version 29 is used for data analysis. A descriptive and inferential analysis is implemented in this research to understand the level of financial stress, and its effects on depression symptoms among working adults in Malaysia. A descriptive analysis encompasses data such as frequency, percentage, mean (M), and standard deviation (SD) value for determining the level of financial stress among working adults in Malaysia.

Meanwhile, inferential analysis encompasses multiple regression analysis which matches the research objective of identifying the effect of affective reactions, interpersonal behavior, and physiological responses of financial stress on depression symptoms among working adults in Malaysia.

4. RESEARCH FINDINGS

A sum of 210 working adults in Malaysia participated voluntarily in this research by filling in the 39-item questionnaire written virtually in an online Google Form. Table 1 summarizes the demographic analysis of the study. The results show that the distribution of male (47.6%) and female (52.4%) respondents was nearly equal. Next, the majority of the respondents were single (57.1%) had an age range between 18 to 31 (58.1%), and were Malay (58.6%).

In terms of main working states or federal territories, most of them were from Wilayah Persekutuan Kuala Lumpur (22.9%). Finally, for the years of working, the majority of the respondents had less than 15 years of working experience (75.7%).

Table 1. Summary of demographic analysis (n=210).

Items	Category	Frequency (f)	Percentage (%)
Gender	Male	100	47.6
	Female	110	52.4
Marital status	Married	89	42.4
	Single	120	57.1
	Divorcee	1	0.5
Age	18 - 31	122	58.1
	32 - 45	63	30.0
	46 - 60	25	11.9
Race	Malay	123	58.6
	Chinese	62	29.5
	Indian	4	1.9
	Other	21	10.0
Main working states or federal territories	Johor	26	12.4
	Kedah	6	2.9
	Kelantan	7	3.3
	Malacca	17	8.1
	Pahang	7	3.3
	Penang	31	14.8
	Perak	3	1.4
	Sabah	18	8.6
	Sarawak	1	.5
	Selangor	42	20.0
	Terengganu	3	1.4
	Wilayah Persekutuan Kuala Lumpur	48	22.9
	Wilayah Persekutuan Labuan	1	.5
	Years of working	0 - 15	159
16 - 30		45	21.4
31 - 40		6	2.9

4.1. The Level of Financial Stress

The first objective of this research is to measure the level of financial stress among working adults in Malaysia. According to the data analysis, the overall mean financial stress score among working adults in Malaysia is moderate ($M = 2.73$, $SD = 0.959$), with most of the items in the APR Financial Stress Scale exhibiting a moderate level. Table 2 displays the level of financial stress of working adults in Malaysia, which is divided into three levels – low, moderate, and high. Based on the table, it is found that a larger number of respondents experience low (33.8%) and high levels (33.8%) of financial stress than moderate levels (32.4%).

Table 2. The level of financial stress among working adults in Malaysia.

Predictor	Level	Frequency (f)	Percentage (%)
Financial stress	Low	71	33.8
	Moderate	68	32.4
	High	71	33.8

4.2. The Effect of Financial Stress on Depression Symptoms

The second research objective is to investigate the effect of financial stress on depression symptoms among working adults in Malaysia. Table 3 illustrates the multiple regression between financial stress (affective reactions, interpersonal behavior, and physiological responses) and depression symptoms.

Table 3. The impact of financial stress on depression.

Predictors (Financial stress)	Unstandardized coefficients		Adjusted R-square	F-change	t-value	p-value
	Beta (β)	SE				
Affective reactions	0.198	0.047	0.558	89.071	4.229	0.001**
Interpersonal behaviors	0.178	0.056			3.163	0.002**
Physiological response	0.127	0.044			2.891	0.004**

Note: SE=Standard error, ** Correlation is significant at the 0.05 level (2-tailed).

The results below indicate that there is a significant positive effect of affective reactions, interpersonal behavior, and physiological responses on depression symptoms among working adults in Malaysia, $F(3, 206) = 89.071$, $p < .0005$, $R^2 = .558$. In other words, all the independent variables have a significant positive impact on depression symptoms among working adults in Malaysia which supports Hypothesis 1,2 and 3.

5. DISCUSSION

The first objective of this research is to measure the level of financial stress among working adults in Malaysia. According to the data findings obtained in descriptive analysis, it is found that on average, the working adults in Malaysia experience moderate levels of financial stress. One of the researchers that support similar findings is Lee et al. (2023) stating that a greater stress level is found among employees in South Korea, due to financial-related negative events (e.g. loss or limited access to financial resources) during the pandemic compared to pre-pandemic. Moreover, on average, a moderate financial stress level is found among the individuals who reported a variety of degrees of financial difficulty (Huang, Ghose, & Tang, 2020). In a Malaysia-based context, Sabri and Falahati (2013) claim that financial stress levels are moderate to high for employees with similar levels of financial problems, which also results in a low level of financial well-being. It further states that the higher coefficient of financial stress may be interpreted as greater economic distress, which is also aligned with the Diathesis-Stress model.

There are several external factors affecting the data findings, and one of them is financial well-being which entails financial commitments, financial behaviors, and financial literacy. As financial resources play a role in identifying the financial stress level of an individual, it is undoubtedly for lower financial income results in higher financial stress levels (Magli, Sabri, Abdul Rahim, & Othman, 2021; Mahdzan, Zainudin, Sukor, Zainir, & Wan Ahmad, 2019). This highlights that insufficient financial resources may result in higher financial stress due to the incapability of comfortably committing to financial responsibilities. In addition, financial behaviors which are the performance acted in regards to financial management act as a factor contributing to financial stress. Good financial behavior is reflected by any effective behaviors that lead to financial goals, for example, tracking financial records and excellent financial decision-making. In contrast, poor financial behavior includes any behavior that portrays poor financial management, such as splurging, irrelevant debt value, late payment resulting in higher interest and penalty, and many more. However, financial behavior can be tailored through financial literacy, which is defined as the ability and knowledge to carry out effective financial decision-making (Loke, 2015). This includes helping individuals to save more effectively and enhance their assets and wealth accumulation for future uses, which also affects one's financial behavior to a positive spectrum. All in all, financial stress levels may differ for individuals, regardless of background or employment status, as proven by various topic-related studies. This research finds moderate financial stress among working adults in Malaysia, but this may also be influenced by other external factors, such as the interrelation with financial well-being in an individual.

The second objective of this research is to investigate the effects of financial stress on depression symptoms among working adults in Malaysia. The result obtained through the inferential analysis concluded a significant positive effect between the variables – financial stress and depression symptoms, in which higher financial stress led to higher depression symptoms. This finding also explains several similar outcomes of past research by Manaf et al. (2016) stating individuals with lower income have higher depression compared to those with higher income. In

previous writing, income has been mentioned as a part of stimulus that results in financial stress response, in which low incomes as inversely correlated to high financial stress. Thus, it may be concluded that high financial stress is linked with high depression symptoms. In Malaysia, Yeoh, Tam, Wong, and Bonn (2017) prove a significant positive relationship between depression and stress, implying that individuals with higher stress cause more severe depression. Also, the researcher concludes that Malaysians are expected to lean more portraying depressive symptomology if their stress level gets higher.

Throughout the process of research writing, several limitations are identified. Firstly, this research focuses on financial stress and its effects on depression symptoms among working adults in Malaysia. However, it is found that there is a lack of research conducted in Malaysia on previous times related to the chosen topic, resulting in difficulties in applying topic-related information in the research. Next, as convenience sampling is chosen for this research methodology, it is prone for the respondent selection to be biased due to its benefits of easy accessibility regardless the geographical proximity, time flexibility, or voluntary participation. The respondents are also offered a small token of appreciation at the end of the questionnaire, which is in the form of a monetary value of Ringgit Malaysia (RM) 1.00 through Quick Response (QR) code scanning at the Touch 'N GO application. This gift may be a limitation of the research as respondents may not be authentic in responding to the questionnaire and only care for a monetary reward (Hample, 1980). Lastly, although it is confirmed by the researcher that data collection is kept confidential, due to the questionnaire being a self-report method, there is a high chance of response bias in terms of deceiving answers for a positive representation of the respondents themselves.

As there are some limitations listed in the previous subtopic, a list of suggestions is written to modify and improve the upcoming research on a similar topic. Firstly, it is highly encouraged for future researchers to implement a probability sampling method such as cluster sampling for this topic. It is believed by implementing such a method, the data collection will be presented equally for the demographic section of working areas, since each state or federal territory is represented by an equal number of respondents. It is recommended that all respondents are not informed in prior regarding the appreciation gift prepared by the researcher to avoid response bias, although it is meant to attract more respondents to partake in the research. Also, it is recommended that the researcher choose a research instrument that also provides a Malay language translated version. This is because some of the qualified respondents are more comfortable answering the questionnaire given in the Malay language. The presence of a translated version may avoid the tendency of receiving response bias, which entails a language barrier and misinterpretation. Lastly, according to the data findings of the research, it is highly recommended for authorities especially in the health and financial sectors to dive deeper into the cruciality, and construct solutions to ensure Malaysians' well-being that is affected by financial-related stressful events. For example, creating easy access to financial and mental health aid to the affected citizens. Also, the data findings may encourage the younger generations to take serious notice of the importance of financial health for positive mental health. For example, young adults begin to develop an interest in managing financial activity effectively at an early age, to ensure a lower risk of developing mental illness symptoms such as depression.

6. CONCLUSION

Conclusively, the research objectives in this research are successfully elaborated and discussed thoroughly. The data findings can measure the financial stress level among working adults in Malaysia, and its effects on depression symptoms among working adults in Malaysia. It has been shown that working adults in Malaysia possess a moderate level of financial stress, and there is a significant positive effect for all dimensions of financial stress on depression symptoms, in which higher affective reactions, interpersonal behavior, and physiological responses lead to higher depression symptoms. Additional considerations and research are highly encouraged for future researchers.

Funding: This research is supported by Ministry of Higher Education under the Fundamental Research Grant Scheme (Grant number: FRGS/1/2020/SS0/UTM/02/23).

Institutional Review Board Statement: The Ethical Committee of the Faculty of Social Sciences and Humanities, Universiti Teknologi Malaysia has granted approval for this study on 26 July 2023 (Ref. No. SHMY3092).

Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.

Competing Interests: The authors declare that they have no competing interests.

Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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