

Improving Lives and Promoting Health for the Elderly in Thailand

¹Wijittra Srisorn, ²Sutham Cheurprakobkit, ³Duangruedee Eaosinsup, ⁴Tikhamporn Punluekdej⁴

¹*Suan Sunandha Rajabhat University, Thailand, wijittra.sr@ssru.ac.th*

²*Mahidol University, Thailand, sutham.che@mahidol.ac.th*

³*The Royal Thai Police, Thailand, duangruedee.ta@gmail.com*

⁴*Southeast Asia University, Thailand, tikhamporn.pu@gmail.com*

Abstract

The objective of this study is to understand the role of critical factors in improving life and promoting health for the elderly in Thailand. Understandably, the policies are required to develop strategies for the protection of the health of elderly people in Thailand. The random sampling method was used in this study to collect the data from 700 individuals of the target population on the questionnaire. The study concludes that there is an important role of exercise, a healthy diet, and better sleep to avoid stress and promote health in the elderly people of Thailand. The study is significant because it provides not only the theoretical framework, at same time, it provides practical implications that are needed to improve the life and health of elderly people of Thailand.

Keywords: Promoting health, exercise, healthy diet, avoid stress and better sleep.

I. INTRODUCTION

In modern times, health facilities and health promotion have become critical factors for successful living in society. In this regard, different kinds of strategies are being developed by different stakeholders to ensure that people are provided with better health opportunities within society. However, on the other hand, there is less attention paid to the issue of health-related to the elder in Thailand. It is because the elder and Thailand are not actively participating in different kinds of physical and mental activities, due to their bad health condition, therefore their performance is decreased (Pattanakuhar et al., 2022). In this way, there is a lack of strategies and policies for the elder regarding their health promotion.

Exercise refers to the physical activities done by the individuals for maintaining better health for their better performance with the society or

at the job (Puntub & Greiving, 2022). The people of the developed countries are highly involved and encouraged to participate in different kinds of exercises for not only improving their performance but working for the prosperity of the society. A healthy diet refers to the strategy of eating or consumption by the individuals to ensure that they are not getting any kind of problematic situation in the way of their health promotion (Charoenwat et al., 2022). However, a healthy diet is not only critical but it has a necessary role that is beneficial for the people to ensure their performance according to their health condition. Better sleep refers to the opportunity provided to the people for getting better sleep not only in terms of their relaxation but as result getting the better output from the work in progress (Nakasu et al., 2022). In the same way, with the help of a better sleep different kinds of activities are provided to the people to

get the results, appropriately. Avoid stress refers to the opportunity is provided to the individual to avoid their mental problem, and productively work for prosperity (Tanantong, Pannakkong, & Chemkomnerd, 2022). Health promotion refers to the opportunities provided to the people to promote their health by different factors to utilize all of these in getting a better result for the overall performance of the individual.

The objective of this study is to understand the critical factors that are contributing to the promotion of health in the elders of Thailand. In this regard, this study aims to develop a theoretical framework with the help of the previous two days to ensure that what are the critical factors that are not discussed by the earlier studies in the relationship with health promotion. However, this study is designed to demonstrate health promotion not only theoretically, but it is to provide the success factors to the people to ensure that performance productively. Similarly, this study has the purpose of developing strategies and analyzing the factors that are contributing directly or indirectly to the health promotion of the elders of Thailand, because the health crisis are increasing in Thailand (Charoenwat et al., 2022).

The significance of this study is that no study earlier has discussed the role of exercise, a healthy diet, and better sleep to avoid the level of stress and promote the health of the elders of Thailand. Significantly, this study not only addressed the theoretical gap because it was identified that there is a clear theoretical gap in the literature regarding the promotion of health in elders of Thailand. Similarly, this study has the objective to understand what is a critical success factor in the life of elders and how they can maintain their batter health without consulting with different kinds of methods.

2. Literature Review and Theoretical Framework

2.1 Role of Exercise in Avoid Stress and Health Promotion

Exercise is considered as one of the effective forces to maintain health by different departments of health maintenance and health promotion (Paiboonvong, Tedtaisong, Montakantikul, Gorsanan, & Tantisiriwat, 2022; Puntub & Greiving, 2022). In this regard, it is important to understand that with the help of exercise human beings are maintaining their health for centuries and this concept of maintaining health is not new in Thailand. However, according to Kitchanapaibul et al. (2022), different kinds of practices are used in exercises to ensure that the people are getting relaxation from the exercise and the other benefits generated as the output of exercise. Similarly, in the United States of America, half of the population is involved in daily exercise and, as result, the average health of people is according to the standard set by the United Nation (Charoenwat et al., 2022). However, on the other hand, according to Tanantong et al. (2022), there are countries where people are less caring about their health, and they are not activities participating in the activities related to exercise and this regard the people are creating problems not only for themselves but for the society at the greater level due to their limited vision. There are different benefits of exercise but the most important benefit is that it helps the individual psychology by developing a positive attitude and avoiding the level of suppression within the people (Nakasu et al., 2022). On the one hand, those people who are actively involved in the third activities there are getting better results in the term of managing exercise will activities and achieving a low level of stress (Paiboonvong et al., 2022). But on the other hand, some people are not actively participating in the exercises, and other related activities in a result the people are not only failed to provide better health solutions, but they are also facing mental crises including stress and anxiety. In this way, it is important to understand that there is a critical role of exercise in the life of people.

H1. There is a relationship between exercise and avoiding stress.

H2. There is a relationship between exercise and health promotion.

2.2 Rolf of Healthy Diet in Avoid Stress

Health diet is considered as one of the critical factors in managing the health of people when they are actively participating in different kinds of activities and trying to ensure their better health (Kitchanapaibul et al., 2022). Different doctors are recommending the people about their healthy diet because it is observed that the people who are not taking proper health right these people are facing a different kind of crisis. In this regard, it is also understood that with the help of a healthy diet, the people are producing quality in their exercise for their health condition (Tanantong et al., 2022). On the one hand, some people are actively participating in different kinds of activities, these people are getting better advantage because they maintain their health with the recommendation of their doctors (Nakasu et al., 2022; Paiboonvong et al., 2022). On the other hand, some people are failed to maintain their health and, in this way, the level of stress in them is increased because they are not properly taking a healthy diet according to the scheduled plan. It is important to understand that there is a critical rule of scheduled plan in the health diet planning of the individual because with the help of schedule plan it would become fair for the people to get the advantage and to all the things accordingly. In UAE and Saudi Arabia, doctors are suggesting proper health plans to the patients to improve their mental condition because it is noted that the patient who is not caring about their health, these patients are facing problems at the largest scale (Khaonuan, 2022). On the one hand, some people are developing strategies according to their healthy diet and they believe that with the help of proper has died they would avoid the mental stress and all other problem that are a hurdle in their way of success. On the other hand, some people believe that a healthy diet is not responsible for the stress level but other factors are creating problems in the way of prosperity and proper maintenance of mental capability to avoid stress (Sapbamrer et al., 2022). The earlier studies written by the health experts concluded that there is a critical role of a healthy diet in the maintenance of individual

health according to the plan for getting better results for the long term.

H3. There is a relationship between a healthy diet and avoiding stress.

2.3 Role of Better Sleep in Avoid Stress and Health Promotion

It is important to understand that there is a critical role of sleeping in the life of an individual because proper sleep is important for battery working (Nakasu et al., 2022). In this regard, it is important to understand that with the help of proper sleep people are capable of doing work in the daytime and other times as well because they are more relaxed and their body is fresh to work. Furthermore, it is also noted that the people who are trying to get better sleep, are developing their mental capabilities and other important factors that are contributing to their personality to avoid the level of stress. On the one hand, according to Kitchanapaibul et al. (2022), some people are developing strategies to get better health with the help of the natural environment, these people are far away from any kind of mental stress but their capabilities are improved to work in a prosperous way. However, on the other hand, according to Sapbamrer et al. (2022), some people are failed to get better sleep due to their workload and with routine, these people are facing problems mental because they are not fresh for completing the task. In this regard, according to doctors and health experts, better sleep is a critical factor that is contributing to the success of better health promotion and avoiding all the unnecessary levels of stress faced by people (Khaonuan, 2022). In Canada, mental exercises are conducted on a weekend basis by different private organizations in which people participate to learn about the strategies to ensure better sleep and remove all kinds of mental barriers in a way of success (Suwannarong et al., 2022). Significantly, still, the Canadian people are not capable to reduce the level of stress with the help of better sleep because they are not provided with the opportunity but their busy routine is not providing them a way to avoid stress and promote their health.

H4. There is a relationship between better sleep and avoiding stress.

H5. There is a relationship between better sleep and health promotion.

2.4 Role of Avoid Stress in Health Promotion

Health is one of the critical factors in the life of an individual because without health the prosperity of life is not accepted (Sapbamrer et al., 2022). In this regard, it is important to understand that different other factors are contributing to health promotion. In the same way, one of the critical factors in avoiding the level of stress that is critically contributing to strategies is because if the mental problem level is low then it would be easier for the individual to promote their health activities. In this regard, according to Moallef et al. (2022), it is also noted that with the help of mental drilling and psychological problems solving, the people are capable to improve their standard of living and ensuring their best capability for getting better health and other necessary activities. In America and the United Kingdom, the experts are promoting the health of the individual including the elders and the women with the help of the mental drilling in which the people are provided the opportunity to share their critical things with others to avoid mental conflicts by adopting the mental capabilities and other skills (Chuaypen et al., 2022). It is not enough for better health promotion but at

the same time, the people must be provided with the opportunity to participate in advanced learning to avoid the level of stress. Significantly, the people who are taking part in mental drilling and other mental activities to eliminate all of the mental barriers, and these people are getting better health promotion with the help of better health conditions (Moallef et al., 2022). Additionally, the people that are getting the opportunities for eliminating all of the ridiculous barriers of mental Problems and their process at they should be responsible and adaptive the different practices to avoid the level of stress for the promotion of health standards. In developing countries, people are working on the plans and strategies according to their mental and physical conditions to be part of the exercise for reducing the mental problem and getting things done appropriately (Sapbamrer et al., 2022; Suwannarong et al., 2022).

H6. There is a relationship between avoiding stress and health promotion.

H7. There is a mediating role of avoiding stress between the relationship of exercise and health promotion.

H8. There is a mediating role of avoiding stress between the relationship of a healthy diet and health promotion.

H9. There is a mediating role of avoiding stress between the relationship of better sleep and health promotion.

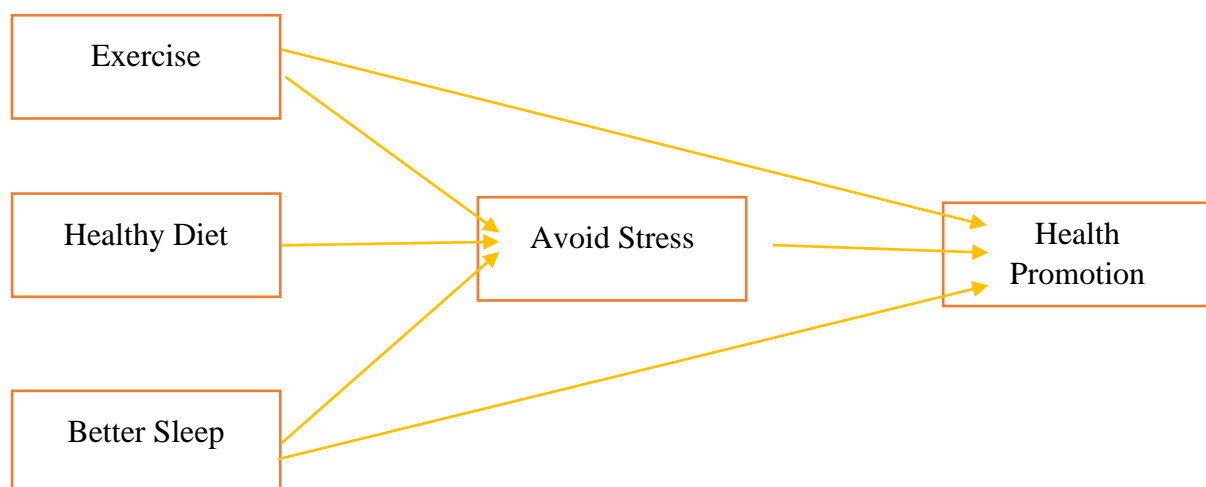


Figure 1. *Theoretical Framework*

3. Prepare Questionnaire and Data Collection

To proceed with the study and collect the data from the target respondents, a questionnaire was developed. However, there were two sections in the questionnaire. The first section was to get the demographic information of the respondents according to their age, gender, and social status. Moreover, in the second section of the questionnaire, the scale items were taken for each variable to measure the data according to the relationship of hypotheses. In this way, the items were carefully taken and it was ensured that these items are according to the context of the study. To collect the data from the respondent, a brief introduction of the study was provided to 700 respondents. After the brief introduction about the study, the respondents were asked to respond to the customer according to their response on the questionnaire according to their perception to contribute to the worth of the study. After

getting their response, the questionnaire was collected back to proceed with the study and data analysis.

4. Findings

4.1 Convergent Validity

This section of the study contains has information related to the validity and reliability of the variables and the scale items available in Figure 2. To get the values, the Smart PLS 3 software was used in this study to get the values related to factor loadings, CR and AVE. The values of loadings for each variable were higher than 0.60. In the same way, the value of AVE for each variable was greater than 0.50. Similarly, the CR values for each variable were greater than 0.70 which is recommended by Ramayah, Cheah, Chuah, Ting, and Memon (2018), for the modern studies available in Table 1.

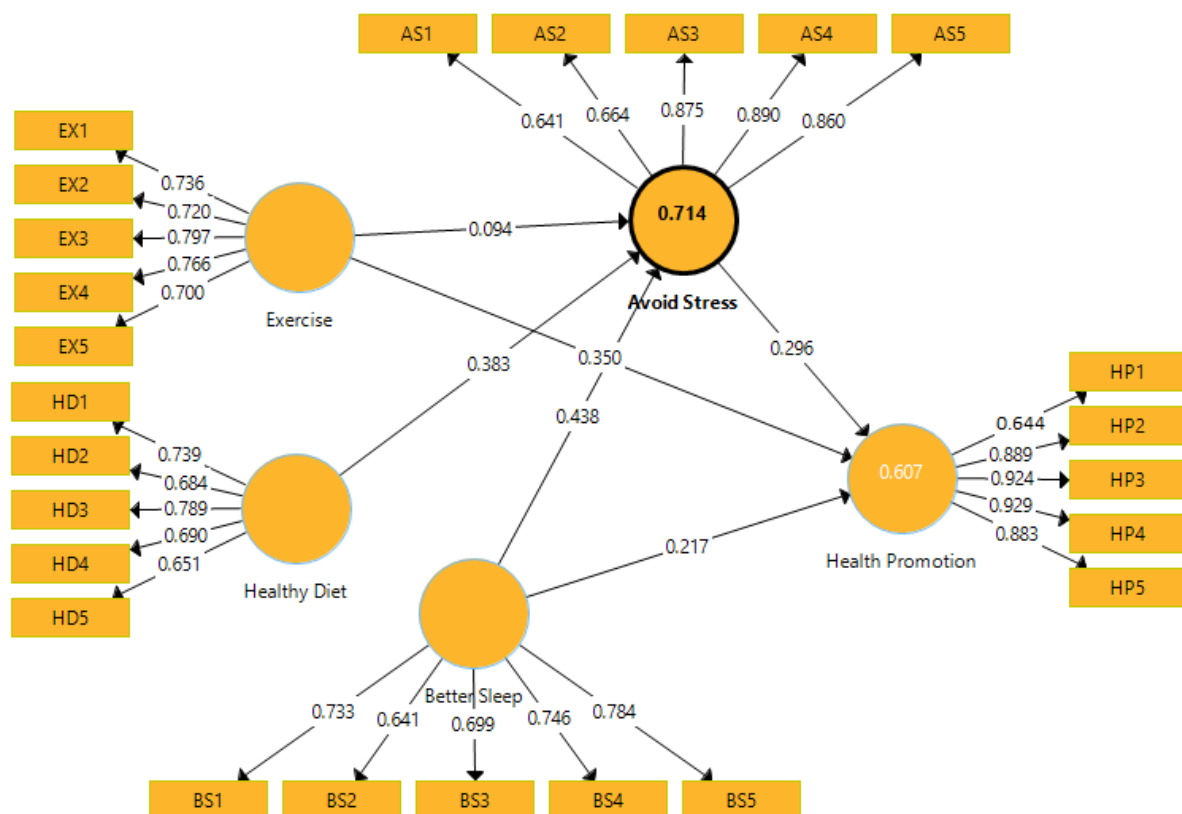


Figure 2. Measurement Model

Table 1. *Factor Loadings, CR and AVE*

Variable	Items	Loadings	Alpha	CR	AVE
Avoid Stress	AS1	0.641	0.848	0.893	0.630
	AS2	0.664			
	AS3	0.875			
	AS4	0.890			
	AS5	0.860			
Better Sleep	BS1	0.733	0.776	0.844	0.522
	BS2	0.641			
	BS3	0.699			
	BS4	0.746			
	BS5	0.784			
Exercise	EX1	0.736	0.806	0.861	0.554
	EX2	0.720			
	EX3	0.797			
	EX4	0.766			
	EX5	0.700			
Healthy Diet	HD1	0.739	0.762	0.837	0.507
	HD2	0.684			
	HD3	0.789			
	HD4	0.690			
	HD5	0.651			
Health Promotion	HP1	0.644	0.891	0.925	0.717
	HP2	0.889			
	HP3	0.924			
	HP4	0.929			
	HP5	0.883			

4.2 Discriminant Validity

This section of the study contains the information related to the discriminant validity to ensure that the scale items used for each variable are different from each other. However, the HTMT method was used to get these values, and in this regard, it was identified that all the values were less than 0.90

which is recommended by Ringle, Da Silva, and Bido (2015) for modern studies. Additionally, according to these values, it is observed that there is a clear discriminant validity between the scale items that are used for each variable that is best and worthy for the study. The values of the HTMT method for discriminant validity are available in Table 2.

Table 2. *Discriminant Validity*

	Avoid Stress	Better Sleep	Exercise	Health Promotion	Healthy Diet
Avoid Stress					
Better Sleep	0.828				
Exercise	0.791	0.816			
Health Promotion	0.811	0.800	0.782		
Healthy Diet	0.844	0.851	0.83	0.822	

4.3 The PLS-SMEs Results

This section of the study contains the direct effects available in Figure 3. In this regard, H1 was tested to check its significance and according to the results Exercise has a significant effect on Avoid Stress ($\beta= 0.094, t= 4.700, p= 0.000$) and H1 is supported available in Table 3. H2 was tested to check its significance and according to the results Exercise has a significant effect on Health Promotion ($\beta= 0.350, t= 6.373, p= 0.000$) and H2 is supported. H3 was tested to check its significance and according to the results, Healthy Diet has a significant effect on Avoid

Stress ($\beta= 0.383, t= 5.726, p= 0.000$), and H3 is supported. H4 was tested to check its significance and according to the results, Better Sleep has a significant effect on Avoid Stress ($\beta= 0.438, t= 8.804, p= 0.000$), and H4 is supported. H5 was tested to check its significance and according to the results, Better Sleep has a significant effect on Health Promotion ($\beta= 0.217, t= 2.759, p= 0.006$), and H5 is supported. H6 was tested to check its significance and according to the results Avoid Stress has a significant effect on Health Promotion ($\beta= 0.217, t= 2.759, p= 0.006$) and H6 is supported.

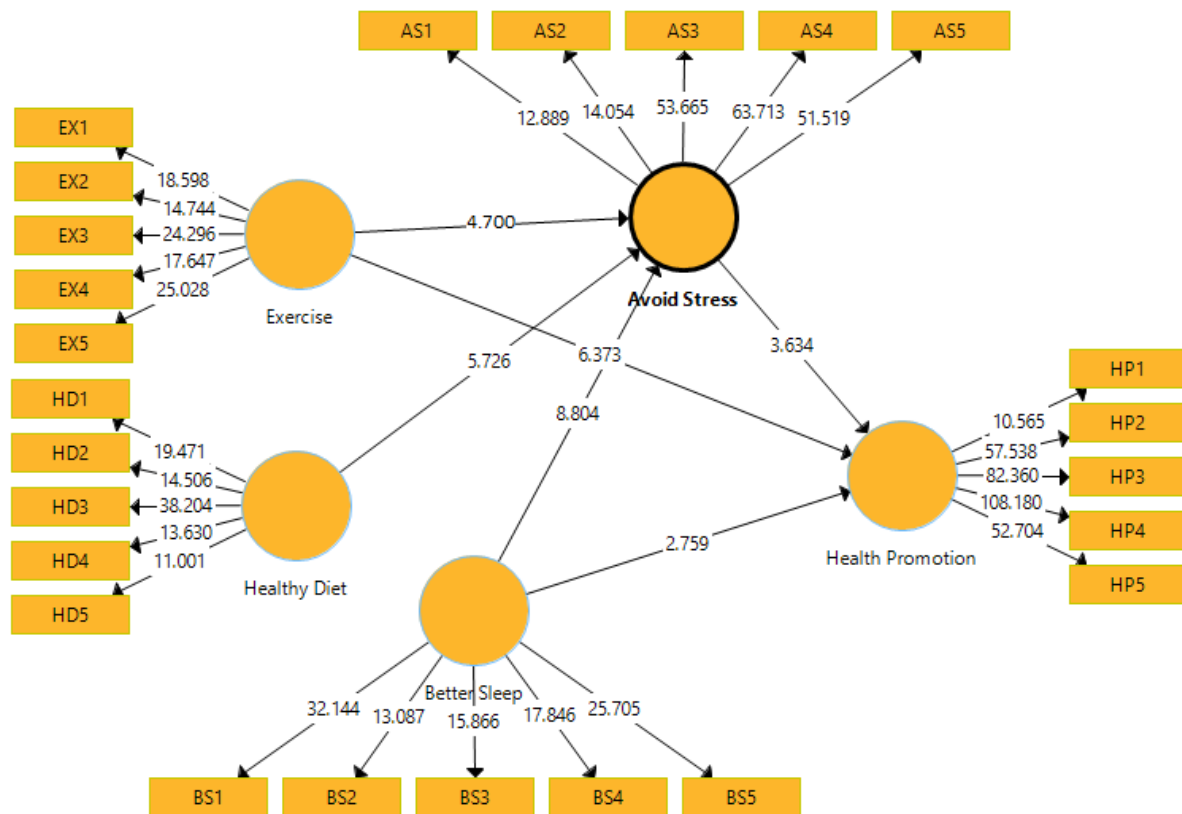


Figure 3. Structural Model

Table 3. Direct Effects

Hypothesis	B	(STDEV)	T Values	P Values	Decision
H1. Exercise -> Avoid Stress	0.094	0.020	4.700	0.000	Supported
H2. Exercise -> Health Promotion	0.350	0.055	6.373	0.000	Supported
H3. Healthy Diet -> Avoid Stress	0.383	0.067	5.726	0.000	Supported

H4. Better Sleep -> Avoid Stress	0.438	0.050	8.804	0.000	Supported
H5. Better Sleep -> Health Promotion	0.217	0.079	2.759	0.006	Supported
H6. Avoid Stress -> Health Promotion	0.296	0.081	3.634	0.000	Supported

4.4 Mediation Effects

This section of the study contains the mediating analysis effects available in Table 4. In this regard, H7 was tested, and the results show that there is a significant mediating role of Avoid Stress between the relationship of Exercise and Health Promotion ($\beta = 0.128$, $t = 6.736$, $p = 0.000$). Furthermore, H8 was tested, and

according to the results, there is also a significant mediating role of Avoid Stress between the relationship of Healthy Diet and Health Promotion ($\beta = 0.113$, $t = 3.217$, $p = 0.001$). Furthermore, H9 was tested, and according to the results, there is a significant mediating role of Avoid Stress between the relationship of Better Sleep and Health Promotion ($\beta = 0.129$, $t = 3.007$, $p = 0.003$).

Table 4. *Mediation Effects*

Mediation Effects	B	(STDEV)	T Values	P Values	Decision
H7. Exercise -> Avoid Stress -> Health Promotion	0.128	0.019	6.736	0.000	Supported
H8. Healthy Diet -> Avoid Stress -> Health Promotion	0.113	0.035	3.217	0.001	Supported
H9. Better Sleep -> Avoid Stress -> Health Promotion	0.129	0.043	3.007	0.003	Supported

5. Discussion and Conclusions

According to the results of H1 and H2, there is a significant relationship between exercise avoidance stress and health promotion. No doubt, for the promotion of better health for the elderly people in Thailand it is critical that they must be provided with opportunities for that exercise activities to ensure they are physically fit and mentally strong (Numpong et al., 2022). In the same way, this study demonstrates that with the exercise the elderly people in any country, food experience the best health facilities. According to the results of H3, there is a significant relationship between a healthy diet and avoiding stress. It is because if the level of stress is minimum then it would be appropriate for the people to get better health. In this way, the healthy diet plan helps people to get the opportunity for minimizing the level of mental problems that are triggered by junk foods.

According to the results of H4 and H5, there is a significant relationship between better sleep, avoiding stress, and health promotion. In this

regard, it is important to understand that if people want better health and health-related facilities, then they must go with better sleep because that is sleep is critical to health. However, it is also noted that the people who are facing problems in better sleep, and they are not getting things accordingly in result not only their performance is low but they are left behind.

According to the results of H6, there is a significant relationship between avoiding stress and health promotion. Moreover, it is understood that mental problems like stress and anxiety are limiting the human potential for better health and performance. In this regard, better health facilities are provided to the people as the result they would get better opportunities and develop that strategy for their routine life (Numpong et al., 2022). According to the results of H7, H8, and H9, there is a mediating role of avoiding stress between the relationship of exercise healthy diet better sleep, and health promotion. In this regard, it is critical to understand that if the focus of an individual is on maintaining the facilities related to health, then it would be appropriate

to focus on avoiding the level of the mental problem because this problem is limiting the experience of people. In this regard, strategies must be developed to ensure prosperity accordingly.

6. Theoretical Implications and Practical Implications

The study has theoretical as well as practical implications that are critical for the maintaining of health promotion for the elderly in Thailand. Firstly, this study provides a clear insight into the theoretical framework and demonstrates that there is a critical role of exercise, a healthy diet, and better sleep in the health promotion of the elderly in Thailand. Secondly, the study addresses the theoretical gap in literature because no earlier study considered, the role of exercise better sleep, and a healthy diet to promote the health of the elderly in Thailand. Thirdly, this study significantly provides recommendations for maintaining better health for the elderly in Thailand. Furthermore, there is a critical role of exercise better sleep, and a healthy diet. In this regard, this study highlights that there must be activities for the elderly in Thailand to ensure that they are getting proper exercise because exercises are critical to a healthy life. At the same time, this study demonstrates that the diet plan policy should be developed for the elderly in Thailand because with the help of diet policy, it would be appropriate for the people to get the diet according to proper schedule that would help them in better health. This study also highlights that there is a critical role of avoiding stress in health promotion because it would be difficult for the elderly in Thailand to have a healthy life if they are facing a mental crisis. In short, the study has theoretical as well as practical implications to ensure and improve the health standard of the elderly in Thailand.

7. Limitations and Future Directions

This study is limited to exercise, a healthy diet, and better sleep to understand the relationship of these factors in health promotion. However,

these three are not the last factors, but at the same time, different other factors are influencing and contributing to health promotion. In this regard, future studies should consider the role of communication health-related workshops and the recommended diets to understand the relationship of these factors in the health promotion of the elder of Thailand.

Reference

- [1] Charoenwat, B., Suwannaying, K., Paibool, W., Laoaroon, N., Sutra, S., & Thepsuthammarat, K. (2022). Burden and pattern of acute diarrhea in Thai children under 5 years of age: A 5-year descriptive analysis based on Thailand National Health Coverage (NHC) data.
- [2] Chuaypen, N., Khlaiphuengsin, A., Prasoppokakorn, T., Susantitaphong, P., Prasithsirikul, W., Avihingsanon, A., . . . Praditpornsilpa, K. (2022). Prevalence and genotype distribution of hepatitis C virus within hemodialysis units in Thailand: role of HCV core antigen in the assessment of viremia. *BMC Infectious Diseases*, 22(1), 1-11.
- [3] Khaonuan, B. (2022). Development of Mohanamai Network for Road Traffic Injury Management Lesson Learned of Thailand. Paper presented at the Conference on Interdisciplinary Approach in Sports in conjunction with the 4th Yogyakarta International Seminar on Health, Physical Education, and Sport Science (COIS-YISHPESS 2021).
- [4] Kitchanapaibul, S., Apidechkul, T., Srichan, P., Mulikaburt, T., Singkhorn, O., Udplong, A., . . . Tamornpark, R. (2022). Status of the stateless population in Thailand: How does stigma matter in their life? *PloS one*, 17(3), e0264959.
- [5] Moalleg, S., Salway, T., Phanuphak, N., Kivioja, K., Pongruengphant, S., & Hayashi, K. (2022). The Relationship Between Sexual and Gender Stigma and Difficulty Accessing Primary and Mental Healthcare Services Among LGBTQI+ Populations in Thailand: Findings from a National Survey. *International Journal of Mental Health and Addiction*, 1-19.

- [6] Nakasu, T., Bula-Or, R., Anantsuksomsri, S., Duangkaew, S., Prathumchai, K., Positlimpakul, K., & Kawasaki, A. (2022). Measuring capacities and protecting communities: strengthening regional resilience in the flooded industrial area in Thailand. *International Journal of Disaster Resilience in the Built Environment*.
- [7] Numpong, S., Kengganpanich, M., Kaewkungwal, J., Pan-Ngum, W., Silachamroon, U., Kasetjaroen, Y., & Lawpoolsri, S. (2022). Confronting and Coping with Multidrug-Resistant Tuberculosis: Life Experiences in Thailand. *Qualitative Health Research*, 32(1), 159-167.
- [8] Paiboonvong, T., Tedtaisong, P., Montakantikul, P., Gorsanan, S., & Tantisiriwat, W. (2022). Correlation between Carbapenem Consumption and Carbapenems Susceptibility Profiles of *Acinetobacter baumannii* and *Pseudomonas aeruginosa* in an Academic Medical Center in Thailand. *Antibiotics*, 11(2), 143.
- [9] Pattanakuhar, S., Kammuang-Lue, P., Komaratat, N., Chotiyarnwong, C., Mahachai, R., & Kovindha, A. (2022). Health care and rehabilitation services utilization, benefits and satisfaction: a community survey of individuals with spinal cord injury in Thailand. *Spinal Cord*, 1-7.
- [10] Puntub, W., & Greiving, S. (2022). Advanced Operationalization Framework for Climate-Resilient Urban Public Health Care Services: Composite Indicators-Based Scenario Assessment of Khon Kaen City, Thailand. *International journal of environmental research and public health*, 19(3), 1283.
- [11] Ramayah, T., Cheah, J., Chuah, F., Ting, H., & Memon, M. A. (2018). *Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0*: Kuala Lumpur: Pearson.
- [12] Ringle, C., Da Silva, D., & Bido, D. (2015). *Structural equation modeling with the SmartPLS*. Bido, D., da Silva, D., & Ringle, C. (2014). *Structural Equation Modeling with the Smartpls*. *Brazilian Journal Of Marketing*, 13(2).
- [13] Sapbamrer, R., Chittrakul, J., Sirikul, W., Kitro, A., Chaiut, W., Panya, P., . . . Sidthilaw, S. (2022). Impact of COVID-19 Pandemic on Daily Lives, Agricultural Working Lives, and Mental Health of Farmers in Northern Thailand. *Sustainability*, 14(3), 1189.
- [14] Suwannarong, K., Soonthornworasiri, N., Maneekan, P., Yimsamran, S., Balthip, K., Maneewatcharangsri, S., . . . Phunta, N. (2022). Rodent-Human Interface: Behavioral Risk Factors and Leptospirosis in a Province in the Central Region of Thailand. *Veterinary Sciences*, 9(2), 85.
- [15] Tanantong, T., Pannakkong, W., & Chemkomnerd, N. (2022). Resource management framework using simulation modeling and multi-objective optimization: a case study of a front-end department of a public hospital in Thailand. *BMC Medical Informatics and Decision Making*, 22(1), 1-21.