



Factors Influencing the Attainment of Mental Health Services

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Abstract. This paper investigates factors in attaining mental health services. Using the Theory of Motivation, Ability, and Opportunity (MAO), a framework consisting of six factors is developed and tested among 254 individuals from Generation Y to Z. This paper also examines the role of health literacy in mediating the relationship between trust and mental health service. This empirical relationship has yet to be established in previous studies. Based on the findings, health literacy enhances trust and improves service utilization by facilitating a better understanding of health information. This paper suggests that improving health literacy may strengthen trust and contribute to improved mental health. Based on these insights, targeted interventions may be developed, and factors impacting mental health service utilization may be better understood.

Keywords: Trust, Health Literacy, Motivation Ability and Opportunity, Mental Health Services.

1 Introduction

Mental health has emerged as a global concern, and it is identified as one of the top health issues in Malaysia [1]. Physical injuries often receive immediate attention, whereas mental illnesses have subtle symptoms at the onset. Moreover, society often misinterprets mental health conditions as personality traits or attitudes. The majority of mental health conditions manifest by the age of 24 [2]. It is widely acknowledged that mental health and well-being play an important role in maintaining health, with the World Health Organization defining health as a state of being physically, mentally, and socially healthy [3]. Since mental health affects thoughts, expression, social interaction, and livelihood, it necessitates the same urgency in treatment as physical health.

Even though mental health is important, acquiring mental health care remains limited [4]. A person's mental health influences their decision-making, behavior, and engagement with mental health care. Evidence suggests that successful engagement with mental health services enhances recovery from mental illness [5]. Mental health conditions have increased among adults, especially among millennials, whose diagnosis of depression has increased by 47% since 2013 [6]. The key to addressing mental health issues among young adults is to understand what drives them and what challenges they face. The concept of mental health can be viewed from the individual, the community, and society. Although marketing research on mental health is limited, both theoretical

and empirical insights on this topic are essential for advancing mental health awareness [7]. Understanding these perspectives more deeply can aid in effectively addressing the rising rates of mental health issues in society.

Although the significance of mental health services is widely acknowledged, numerous barriers prevent people from accessing the care they require. Individuals' trust in mental health professionals and institutions also influences their willingness to engage with services [8]. Even when individuals acknowledge the need for mental health care, some individuals are unable to access it due to their motivation, ability (including financial constraints and logistical challenges), and opportunity. This paper seeks to identify and analyze the factors influencing access to mental health services.

Recent research has highlighted the importance of health literacy—an individual's ability to understand and navigate healthcare systems—in accessing mental health services [9]. For example, Bennett et al. [10] demonstrate how low health literacy can create barriers to accessing mental health services, even when trust in mental health professionals is present. Similarly, studies by McLean et al. [11] explore the difficulties healthcare systems face in recognizing mental illness symptoms and providing appropriate care to those with low health literacy. Despite the growing recognition of its importance, research specifically examining the role of health literacy in building trust between patients and mental health providers remains limited [12], [13]. There is a noticeable gap in empirical studies focusing on the relationship between patient health literacy and provider trust [14]. Therefore, this paper investigates the connections between trust, health literacy, and access to mental health services.

This paper contributes to health literacy by understanding how it impacts trust and mental health service utilization. An individual's ability to process, understand, and access health information is essential for making informed health decisions. [15]. This paper investigates how health literacy mediates the influence of trust on mental health services. This enriches our understanding of how individuals attain mental health services. In healthcare settings, this theoretical insight enhances health behavior models and informs interventions to improve information comprehension and decision-making [16].

This research is critical because it informs targeted interventions and policies to improve mental health services. Health policymakers and providers can develop interventions that address specific factors like trust issues, motivation, and access limitations [17]. For instance, community-based interventions focused on reducing stigma through public education campaigns [18] or enhancing health literacy through interactive workshops and accessible health materials can empower individuals to seek and utilize mental health services effectively. Implementing these initiatives can impact service utilization rates and mental health outcomes within diverse populations, promoting health equity and improving well-being.

2 Literature Review

The attainment of mental health services can be a complex process that involves individuals actively engaging with and receiving treatment, care, and support from mental

health professionals and healthcare systems [5]. Mental illness impacts emotional state, cognitive function, and behavior, causing anxiety and difficulties in various aspects of life. In Malaysia, mental health awareness has increased, with one in three adults affected and mental health problems ranking second after heart disease [19]. Despite treatability, young adults often discontinue treatment, with attrition rates up to 70%, due to unmet needs, perceived lack of necessity, or distrust in services [20].

The theory of motivation-ability-opportunity (MAO) provides a framework for understanding the factors contributing to attaining mental health services. According to the MAO model, the factors are motivation, ability or opportunity, which are important factors in behavior and decision-making [21]. Motivation refers to the desire to act regardless of the environment, ability refers to the ability to moderate behavioral intentions, and opportunity involves external circumstances that facilitate performance. An increase in motivation, ability, and opportunity increases the likelihood of adopting behavior, including attaining mental health services [22].

Various contexts, including mental health service engagement, local community festival attendance, and technology use, have been studied using the MAO model [14], [23]. For instance, Wiggins [24] emphasizes the role of social marketing in segmenting to facilitate targeted interventions. Similarly, Wiedermann et al. [25] highlight the importance of understanding and addressing motivations and challenges faced by individuals with mental health illnesses to reduce barriers to mental wellness.

Engaging consumers through a co-creative approach in healthcare improves outcomes, as patient participation in decision-making enhances engagement and self-management. Individuals engaged in supportive relationships are more likely to adhere to treatments and maintain positive behavior during recovery. By improving communication and addressing immediate needs, mental health services and well-being can be enhanced [26], [27]. Programs that foster trust and address specific patient concerns can significantly improve treatment adherence and the quality of mental health services [26]. This paper examines the variables affecting attaining mental health services through the lens of multiple disciplines, including marketing and the MAO framework, aiming to contribute to the ongoing discourse on promoting participation and addressing mental health concerns.

2.1 Trust and Mental Health Services

Mental health services are most effective when patients and professionals trust one another [28]. Trust enhances an individual's willingness and motivation to seek mental health services and treatment. The absence of trust between individuals and their caregivers can result in reluctance to seek treatment. Patients' confidence in their treatment provider is crucial for a successful patient-provider relationship [14]. Trust is vital in therapeutic relationships, especially for individuals with mental illnesses who may feel vulnerable or uncertain [28]. Trust in caregivers like doctors and therapists fosters treatment adherence and improves mental health literacy. For example, HIV patients who trust their care providers are more attentive and better understand information about their illness [29]. Building a trusting relationship between information providers and

learners facilitates better information acquisition and processing. Based on the paper's findings, we propose the following hypothesis:

H1: Trust has a positive relationship with attaining mental health services.

2.2 Motivation and Mental Health Services

A key component of promoting mental health participation is motivation, which Rothschild [30] defines as the level of willingness to engage in an activity. By combining mental health services with motivation, the likelihood of seeking mental healthcare is increased. The individual's ability to comprehend and utilize mental health information positively impacts their motivation to seek treatment. A person's motivation and drive to achieve personal objectives significantly influence their decision to seek treatment during therapy and rehabilitation. Mental activities have long been associated with a variety of interests, aptitudes, and talents [31]. Therefore, motivation plays an important role in determining whether a person seeks and uses mental health treatment, directly affecting their mental health. Based on its findings, this research puts forward the following hypothesis:

H2: Motivation has a positive relationship with attaining mental health services.

2.3 Ability and Mental Health Services

A person's ability can be defined as their knowledge, understanding, and means of implementing a specific action [30]. Mental health issues can be better managed in the future by educating oneself about the resources available, feeling confident in seeking assistance, and knowing when to ask for assistance. Mental health services are most effective when mental illnesses are identified early, proper care is provided, and the individual has a high awareness of their health. Mental health literacy includes identifying problems, researching, understanding risk factors, and knowing treatment options. Furthermore, it involves attitudes that promote recognition and responsible assistance-seeking. Access to healthcare and health information is vital for enhancing an individual's quality of life and health outcomes. A health disparity may arise if individuals are unable to obtain or comprehend health information properly [32]. In primary care, effective identification and management of mental illnesses can contribute to a more proactive mental health approach. Consequently, enhancing the ability of an individual to understand and utilize health information is essential for improving the effectiveness and accessibility of mental health services. Based on this, we propose the following hypothesis:

H3: Ability has a positive relationship with attaining mental health services.

2.4 Opportunity and Mental Health Services

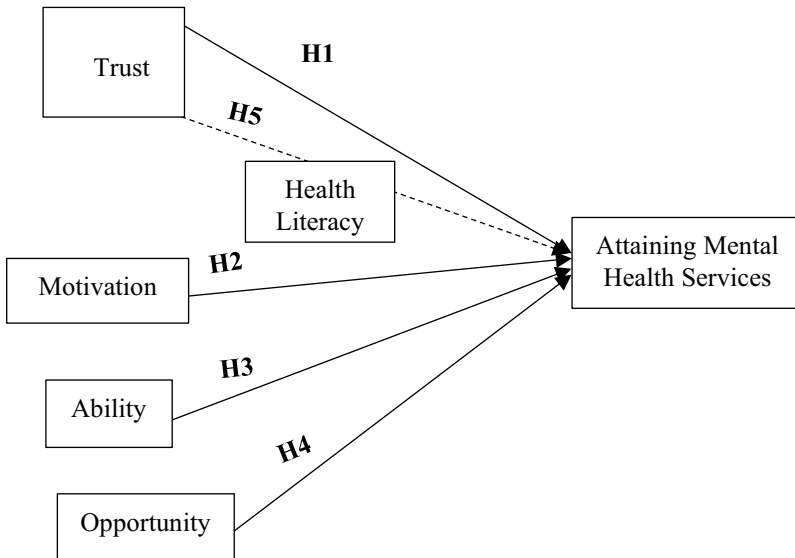
Opportunity encompasses the external environmental factors that enable or hinder an individual's ability to act or engage in a behavior. This includes aspects such as the accessibility, affordability, and geographical proximity of mental health care providers and services [33], [34]. This concept is a component of the motivation-ability-opportunity (MAO) model, which seeks to minimize barriers to mental health treatment [14]. The Affordable Care Act (ACA) is a landmark U.S. federal statute that mandates that medical insurance providers cover behavioral and mental health services, but high costs and a lack of practitioners, particularly in rural and designated Health Professional Shortage regions, remain significant barriers [35]. The improvement of mental health services requires the reduction of costs and the recruitment of more providers. There is a positive correlation between the availability of services and the likelihood of taking up treatment, emphasizing the importance of removing barriers to care and improving accessibility, affordability, and availability to improve mental well-being [14]. For example, reducing therapy costs and increasing the number of mental health practitioners in underserved areas can significantly improve access to necessary mental health care. Therefore, we put forth the following hypothesis:

H4: Opportunity has a positive relationship with attaining mental health services.

2.5 Mediating Role of Health Literacy

Health literacy (HL) is defined as the ability to comprehend and apply medical knowledge in healthcare contexts [36]. In the context of mental health, a high level of health literacy is crucial, as it enables individuals to recognize early symptoms, understand risk factors, and explore treatment options. By equipping individuals with the ability to identify mental health concerns and make informed decisions, health literacy contributes to more proactive mental health management and earlier engagement with mental health services [37]. While trust in healthcare providers is essential for encouraging individuals to seek mental health services, health literacy plays a key mediating role in turning that trust into action. Mackert et al. [38] emphasize that health literacy is not just about acquiring information but about enabling individuals to navigate healthcare systems and access services effectively. With higher levels of health literacy, individuals can comprehend the information they receive from their trusted mental healthcare providers, thus empowering them to make well-informed decisions regarding their mental health [39]. We propose the following hypothesis:

H5: Health literacy mediates the relationship between trust and attaining mental health services.

Figure 1. Conceptual Framework

3 Methodology

The study's target population is adults aged between 18 and 44. This age range captures a critical life stage where individuals often face unique challenges and experiences. Participants were specifically those who had never sought mental health treatment from a psychiatrist or therapist. This paper employed a purposive sampling technique. The minimum sample size was determined using the G-Power software, which indicated that at least 138 samples were necessary. We collected 302 responses for the study to achieve more generalizable results. Nonetheless, 48 responses were deemed invalid as respondents did not allow their data to be processed, and they were above 44 years old. As a result, 254 valid questionnaires remained for analysis.

This study collected the data through a Google Form questionnaire to address the research question [40]. The form was distributed through a variety of social media platforms to solicit responses. The questionnaire comprised 16 questions divided into two sections. Section A gathered personal information, including gender, age, education, and living arrangements. In Section B, respondents should indicate their level of agreement or disagreement with various statements using Likert scale questions. We first

pilot-tested the questionnaire with a psychiatrist, two academics, and two potential participants. After analyzing the feedback received, adjustments were made to the questionnaire before it was distributed in the main study.

The reliability test conducted using Cronbach's alpha demonstrated internal consistency. Pearson correlation, multiple regression, and the PROCESS Macro were used to analyze how health literacy mediates the relationship between trust and mental health services.

4 Data Analysis

4.1 Respondent Profile

Table 1. Demographic Profile

Demographic	Frequency	Percentage (%)
<u>Gender</u>		
Female	186	73
Male	68	27
<u>Age</u>		
18 – 24 years old	194	76
25 – 34 years old	42	17
35 – 44 years old	18	7
<u>Marital Status</u>		
Single	224	88
Married	24	10
Divorced	2	1
Widowed	1	0
Others (in a relationship)	3	1
<u>Ethnicity</u>		
Malay	13	5
Chinese	221	87
Indian	17	7
Others (Bumiputera, Siamese, Iban)	3	1
<u>Highest Education Level</u>		
Primary / Secondary / SPM / STPM / A-Level / Foundation	45	18
Certification / Diploma / Advanced Diploma	42	17
Bachelor's Degree	153	60
Master's Degree / Doctor of Philosophy (PhD)	14	6
<u>Occupation</u>		
Student	171	67
Housewife	2	1
Employed	64	25
Self Employed	6	2
Unemployed	8	3
Retired	3	1

Individual Monthly Income

Less than RM 1500	165	65
RM 1501 – RM 3000	42	17
RM 3001 – RM 4500	28	11
RM 4501 – RM 6000	12	5
RM 6001 – RM 7500	0	0
RM 7501 – RM 9000	4	2
More than RM 9000	3	1

Living Arrangement

With family	184	72
Alone	46	18
With non-relatives	20	8
Homeless	1	0
Others (hostel and dorm)	3	1

The demographic profiles of the respondents are presented in Table 1. The gender breakdown of the 254 participants shows that females make up a significant majority at 73%, with 186 females compared to 68 males (27%). According to the age profile of respondents, 76% or 194 individuals are between 18-24 years old. Most respondents (88%) are single, or 224 individuals. The ethnic composition highlights Chinese as the predominant group, comprising 87% or 221 individuals. The most common educational attainment among respondents is a bachelor's degree (60% or 153). When it comes to occupations, students represent the largest category at 67%, totaling 171 individuals. Regarding monthly income, 65% of individuals earn less than RM 1500. Finally, most (72% or 184) of the individuals live with their families.

4.2 Findings

Table 2. Descriptive Statistics

No.	Variable	N	Mean	Standard Deviation
1.	Trust (T)	254	3.939	0.867
2.	Health Literacy (HL)	254	3.584	0.840
3.	Motivation (M)	254	3.496	0.910
4.	Ability (A)	254	3.661	0.819
5.	Opportunity (O)	254	3.508	0.884
6.	Mental Health Services (MH)	254	3.722	0.690

Table 3. Reliability Test (N = 254)

Variable	No. of Item	Cronbach's Alpha (α)
Trust (T)	4	0.886
Health Literacy (HL)	7	0.883

Motivation (M)	3	0.794
Ability (A)	6	0.880
Opportunity (O)	4	0.826
Mental Health Services (MH)	12	0.910

Table 4. Pearson’s Correlation Analysis

	1	2	3	4	5	6
Trust (T)	1	0.474**	0.451**	0.438**	0.409**	0.675**
Health Literacy (HL)		1	0.613**	0.661**	0.688**	0.642**
Motivation (M)			1	0.614**	0.651**	0.656**
Ability (A)				1	0.767**	0.656**
Opportunity (O)					1	0.622**
Health Services (MH)						1

** Correlation is significant at the 0.01 level (2-tailed).

Table 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.817	0.667	0.662	4.0084

- a. Predictors: (Constant), Trust, Motivation, Ability, Opportunity
- b. Dependent Variable: Attaining Mental Health Services

Table 6. ANOVA

Model	Sum of Square	df	Mean Square	F	Sig
Regression	80.291	4	20.073	124.933	< 0.001 ^b
Residual	40.007	249	0.161		
Total	120.398	253			

- a. Dependent Variable: Attaining Mental Health Services
- b. Predictors: (Constant), Trust, Motivation, Ability, Opportunity

Table 7. Coefficients

Model	Unstandardized Coefficients		Standardised Coefficients	<i>t</i>	Sig.
	B	Std. Error	Beta		
1 (Constant)	0.731	0.138		5.312	<0.001
Trust (T)	0.328	0.033	0.412	9.797	<0.001
Motivation (M)	0.193	0.039	0.255	5.015	<0.001
Ability (A)	0.201	0.050	0.238	4.017	<0.001
Opportunity (O)	0.082	0.048	0.105	1.722	0.043

a. Dependent Variable: Attaining Mental Health Services

Table 8. Total, Direct and Indirect Effect of Trust (T) on Mental Health Services (MH)

Total effect of T on MH					
<u>Effect (B)</u>	<u>SE</u>	<u>t</u>	<u>p</u>	<u>LLCI</u>	<u>ULCI</u>
0.537	0.037	14.517	<0.001	0.464	0.610
Direct effect of T on MH					
<u>Effect (B)</u>	<u>SE</u>	<u>t</u>	<u>p</u>	<u>LLCI</u>	<u>ULCI</u>
0.380	0.037	10.405	<0.001	0.308	0.452
Indirect effect of T on MH					
<u>Effect (B)</u>	<u>BootSE</u>	<u>BootLLCI</u>	<u>BootULCI</u>		
HL 0.157	0.035	0.096	0.229		

Table 2 reveals that T has the highest mean value ($m=3.939$), indicating that the majority of respondents agreed with its aspects. Conversely, M has the lowest mean value, at 3.496.

Table 3 shows the reliability analysis for the variables in this study. All variables' alpha coefficients are above 0.7, indicating strong internal consistency reliability [41].

Table 4 indicates moderate positive correlations between T, HL, M, A, O and MH, indicating that increasing one variable increases the other. The correlations are statistically significant at 0.01, suggesting a high confidence level.

Table 5 shows that the predictors (T, M, A, and O) explain approximately 67% ($R^2 = 0.667$) of the variance in the dependent variable, or the outcome of attaining mental health services. The adjusted R^2 value of 0.662 adjusts for the number of predictors in the model, indicating a high level of explanatory power while accounting for potential overfitting.

Table 6 indicates that the regression model, with predictors including T, M, A, and O, significantly predicts the attainment of mental health services, as evidenced by the F-statistic (124.933) and a p-value less than 0.001. This indicates that the studied model is statistically significant. It explains a substantial portion of the variance in the dependent variable compared to a model with no predictors.

As indicated in Table 7, MH will increase by 0.328 units when T increases by one unit. The p-value being <0.001 suggests a significant correlation. Therefore, H1 is supported. Similarly, M has an unstandardized coefficient of 0.193, meaning MH increases by 0.193 units with a 1-unit increase in M. The p-value being <0.001 signifies a significant relationship. Hence, H2 is supported. Moreover, A has an unstandardized coefficient of 0.201, meaning MH increases by 0.201 units with a 1-unit increase in A. The p-value being <0.001 confirms a significant relationship, thereby supporting H3. Finally, O has an unstandardized coefficient of 0.043, indicating that MH increases by 0.043 units with a 1-unit increase in O. The p-value is 0.043; therefore, H4 is supported.

Based on the standardized coefficient (β), T has the highest β -value of 0.412 with a t-value of 9.797, indicating the strongest influence on MH. M follows with a β -value of 0.255 and a t-value of 5.015, and A with a β -value of 0.238 and a t-value of 4.017.

O has the lowest β -value of 0.105 with a t -value of 1.722, suggesting the least influence on MH.

The mediation analysis was performed using Hayes' PROCESS macro model 4 with 5,000 bootstrapping to examine the mediating role of Health Literacy (HL) in the relationship between T and MH. According to Table 8, the total effect of the model is positive and statistically significant. The direct effect of T on MH was also positive and significant ($B = 0.380$, $SE = 0.037$, $p < 0.001$) with a 95% confidence interval (CI) of [0.308, 0.452]. Additionally, the indirect effect of T on MH through HL was positive and significant ($B = 0.157$, $SE = 0.035$) with a 95% CI of [0.096, 0.229]. These findings confirm the presence of a mediation effect, indicating that HL partially mediates the relationship between T and MH. As a result, H5 is supported.

5 Discussion

The findings show that trust positively correlates with attaining mental health services. A similar finding was reached by AlRuthia et al. [42], who showed that trust in healthcare providers influences mental health service use. T has a significant positive influence on mental health services, as demonstrated by its notable positive effect on MH [14]. The results of this study suggest that patients who trust healthcare providers are more likely to be comfortable, confident, and willing to seek mental health support in the future.

H2 shows that motivation is a crucial factor in influencing the attainment of mental health services. This highlights the importance of internal factors, such as drive and determination, in influencing individuals' decisions to seek and engage with mental health services. Previous research supports this finding, with studies such as those by Jochems et al. [43] highlighting the role of motivation in achieving personal goals related to recovery and treatment. Similarly, Jones et al. [44] also found a positive relationship between M and MH service utilization, reinforcing that motivation plays a significant role in attaining mental health services.

The findings also reveal that ability positively correlates with attaining mental health services. Mental health services accessibility and engagement are strongly influenced by individuals' abilities and skills [45]. The need to seek and utilize mental health support may be more complex for individuals with higher levels of ability, such as problem-solving, coping strategies, and communication skills [46]. It aligns with research emphasizing the role of personal capabilities in promoting help-seeking behavior and positive mental health outcomes [47].

Opportunity is another important factor in attaining mental health services, with the findings confirming a positive relationship between O and MH. This finding is supported by Smith et al. [48], who showed that individuals with greater access to mental health resources and support services were more likely to seek and receive professional help for mental health concerns. Also, the positive association between O and MH is consistent, which suggests that resources and services play a critical role in health-seeking behaviors [49]. Individuals with greater opportunities, such as financial resources and availability of services, are more likely to overcome obstacles and utilize mental health services. Thus, initiatives aimed at enhancing opportunities and reducing

barriers to accessing mental health care could significantly improve mental health outcomes.

Health literacy is a crucial mediator between trust and access to mental health services. The study shows that the direct effects of T and HL on mental health are positive and significant, emphasizing their importance. While T influences MH independently, HL enhances the impact of T on MH.

A similar relationship between HL and T has also been found among healthcare providers, as noted in the study by Chen et al. [12] and Tsai, Yu, and Lee [13]. Developing interventions that enhance health literacy could augment the positive effects of trust, leading to improved utilization of mental health services. This suggests that efforts to improve trust and health literacy are vital for promoting better mental health outcomes [12].

6 Implications

6.1 Theoretical Implications

The Theory of Motivation, Ability, and Opportunity (MAO) has been commonly applied in disciplines like human resource management to explain performance outcomes based on these three factors [50]. However, the literature highlights significant gaps, including inconsistencies and a lack of cohesion in the variables and performance measures used across studies, as well as insufficient empirical evidence showing causation between MAO factors and outcomes, which limits generalisation and theoretical advancement [51].

The paper addresses this gap by extending the MAO framework to the context of mental health services, examining how trust (T) and health literacy (HL) influence access to these services. Before this paper, there was little to no research identifying the influence of HL on the relationship between T and MH [14]. This paper identifies HL as a significant mediator between T and MH, providing valuable insights into improving mental health services. By highlighting HL's role, the paper offers a nuanced perspective on the opportunity dimension within the MAO framework [51], [52].

By integrating health literacy into the MAO model, the research offers new empirical insights into mental health service attainment drivers, enhancing the framework's applicability in healthcare settings. This approach highlights the interaction between trust, motivation, and opportunity, thus contributing to the advancement of MAO theory, focusing on psychological and health literacy factors.

6.2 Practical Implications

The findings of this study have practical implications for mental health centres and providers in Malaysia. By establishing and nurturing trust between mental health providers and clients, treatment outcomes can be optimised, and barriers to seeking treatment can

be reduced. The relationship between T and HL emphasises the importance of fostering trust through education and information exchange. Health literacy initiatives should deliver accurate and culturally relevant information about mental health, treatment options, and available resources to empower individuals to make informed decisions about their healthcare. A higher level of HL increases T in healthcare providers and services, enhancing access to and utilising mental health resources. To improve mental health outcomes in Malaysia, integrated strategies that address communication barriers and knowledge gaps are essential.

In addition, motivation can be increased by increasing awareness of mental health issues and promoting early intervention. There is a great need for educational campaigns and community workshops to dispel myths and increase motivation for people to seek medical attention. Ability can be enhanced through providing culturally appropriate mental health support in the appropriate language and cultural context. This necessitates the development of training programs for mental health professionals that are focused on cultural awareness and cultural communication skills [53]. Additionally, expanding telehealth services can provide more opportunities for patients to access services. Malaysia's Sihat Xpress initiative, in partnership with MEASAT Global Berhad and Mudah Healthtech, aims to provide digital healthcare services to underserved populations by setting up telehealth capabilities in remote communities [54]. Existing telehealth platforms, such as DOC2US, offer virtual health services and teleconsultations, making mental health services more accessible and convenient [53]. By focusing on these areas, mental health centres in Malaysia can improve treatment outcomes, foster trust with clients, and increase accessibility to essential mental health services [55].

7 Limitations and Future Studies

In this study, several limitations were identified. One of the limitations is that the paper does not specifically examine how the key variables (such as trust, motivation, ability, opportunity, and health literacy) affect mental health service utilization among different demographic groups. Demographic factors can significantly affect attitudes, behaviors and experiences regarding mental health services [56]. Future research could include these analyses to determine whether the relationship between key variables and mental health service utilization differs by age group, gender, and marital status. With this approach, mental health can be promoted, and barriers to service utilization can be addressed in a more targeted and tailored manner. Additionally, intersectional factors like age, gender, marital status, and socioeconomic status can provide more profound insights into mental health needs and behaviors related to seeking help.

In addition, the study was limited by a limited data collection period of only two weeks. This has limited the research's ability to gather responses from diverse age groups and ethnicities. Future research should extend the data collection period to several months to collect responses from various demographic groups, enhancing the generalizability of the findings.

Lastly, one significant limitation in studying factors and barriers to accessing mental health services is the potential for recall bias and subjective reporting among participants. This bias may stem from individuals' imperfect memories of past experiences with mental health care, which can be influenced by factors such as emotions, the passage of time, and the stigma surrounding mental health issues. Participants may also provide responses that align with social desirability, masking negative experiences or overemphasizing positive encounters with services. Future research can utilize multiple data sources, including objective measures like health records, conduct longitudinal studies to track changes over time, employ sensitive data collection methods, and consider the broader contextual factors shaping participants' experiences with mental health services. These strategies can enhance the validity and depth of understanding regarding the complexities surrounding mental health service utilization.

This paper concludes that the findings effectively answered the research question and addressed the core issue. The findings show that all hypotheses are supported. Considering the lack of empirical studies on T and HL, this study examines the more profound effects of T, HL, and MH. Studies have been done on the relationship between T and MH but not on the relationship between T, HL, and MH. In the study, it was found that T, HL, and MH are positively related. As a whole, this research aims to provide an overview of the role that HL played in mediating the effects of T and MH.

References

- [1] S. Raaj, S. Navanathan, M. Tharmaselan, and J. Lally, 'Mental disorders in Malaysia: an increase in lifetime prevalence', *BJPsych Int*, vol. 18, no. 4, pp. 97–99, Nov. 2021, doi: 10.1192/bji.2021.4.
- [2] M. Colizzi, A. Lasalvia, and M. Ruggeri, 'Prevention and early intervention in youth mental health: is it time for a multidisciplinary and trans-diagnostic model for care?', *Int J Ment Health Syst*, vol. 14, no. 1, p. 23, Dec. 2020, doi: 10.1186/s13033-020-00356-9.
- [3] W. A. R. Wan Mohd Isa *et al.*, 'Social Wellbeing by Design for Urban Ageing: Health Awareness and IT Services', *International Journal of Academic Research in Progressive Education and Development*, vol. 12, no. 2, Apr. 2023, doi: 10.6007/IJARPED/v12-i2/15145.
- [4] N. C. Coombs, W. E. Meriwether, J. Caringi, and S. R. Newcomer, 'Barriers to healthcare access among U.S. adults with mental health challenges: A population-based study', *SSM Popul Health*, vol. 15, p. 100847, Sep. 2021, doi: 10.1016/j.ssmph.2021.100847.
- [5] L. B. Dixon, Y. Holoshitz, and I. Nossel, 'Treatment engagement of individuals experiencing mental illness: review and update', *World Psychiatry*, vol. 15, no. 1, pp. 13–20, Feb. 2016, doi: 10.1002/wps.20306.
- [6] Blue Cross Blue Shield, 'A Focus on Millennial Health Trends [Internet]', Blue Cross Blue Shield. Accessed: Oct. 09, 2024. [Online]. Available: <https://www.bcbs.com/the-health-of-america/reports/the-health-of-millennials>

- [7] A. R. Andreasen, 'A Social Marketing Approach to Changing Mental Health Practices Directed at Youth and Adolescents', *Health Mark Q*, vol. 21, no. 4, pp. 51–75, Apr. 2004, doi: 10.1300/J026v21n04_04.
- [8] K. B. Brewer *et al.*, 'Stigma's Influence on Mental Health Treatment in China', *Journal of Mental Health and Social Behaviour*, vol. 4, no. 2, 2022, doi: 10.33790/jmhsl1100172.
- [9] C. Liu *et al.*, 'What is the meaning of health literacy? A systematic review and qualitative synthesis', *Fam Med Community Health*, vol. 8, no. 2, p. e000351, May 2020, doi: 10.1136/fmch-2020-000351.
- [10] H. Bennett, B. Allitt, and F. Hanna, 'A perspective on mental health literacy and mental health issues among Australian youth: Cultural, social, and environmental evidence!', *Front Public Health*, vol. 11, Jan. 2023, doi: 10.3389/fpubh.2023.1065784.
- [11] A. McLean, D. Goodridge, J. Stempien, D. Harder, and N. Osgood, 'Health Literacy and Serious or Persistent Mental Illness: A Mixed Methods Study', *HLRP: Health Literacy Research and Practice*, vol. 7, no. 1, Jan. 2023, doi: 10.3928/24748307-20221215-01.
- [12] X. Chen *et al.*, 'Health Literacy and Use and Trust in Health Information', *J Health Commun*, vol. 23, no. 8, pp. 724–734, Aug. 2018, doi: 10.1080/10810730.2018.1511658.
- [13] T.-I. Tsai, W.-R. Yu, and S.-Y. D. Lee, 'Is health literacy associated with greater medical care trust?', *International Journal for Quality in Health Care*, vol. 30, no. 7, pp. 514–519, Aug. 2018, doi: 10.1093/intqhc/mzy043.
- [14] E. Kemp, C. D. Davis, and M. Porter, 'Addressing Barriers to Mental Health Wellness: Prescriptions for Marketing', *Journal of Public Policy & Marketing*, vol. 42, no. 3, pp. 262–278, Jul. 2023, doi: 10.1177/07439156221140787.
- [15] E. Short, *A Prescription for Healthy Living: A Guide to Lifestyle Medicine*. Elsevier Science, 2021. [Online]. Available: <https://books.google.com.my/books?id=XXgSEAAQBAJ>
- [16] P. J. Fitzpatrick, 'Improving health literacy using the power of digital communications to achieve better health outcomes for patients and practitioners', *Front Digit Health*, vol. 5, Nov. 2023, doi: 10.3389/fdgth.2023.1264780.
- [17] E.-D. Williams *et al.*, 'Barriers to School-Based Mental Health Resource Utilization Among Black Adolescent Males', *Clin Soc Work J*, vol. 51, no. 3, pp. 246–261, Sep. 2023, doi: 10.1007/s10615-023-00866-2.
- [18] A. Waqas *et al.*, 'Interventions to Reduce Stigma Related to Mental Illnesses in Educational Institutes: a Systematic Review', *Psychiatric Quarterly*, vol. 91, no. 3, pp. 887–903, Sep. 2020, doi: 10.1007/s11126-020-09751-4.
- [19] Ng SN, 'Tackling mental health issues [Internet].', New Straits Times. Accessed: Oct. 09, 2024. [Online]. Available: <https://www.nst.com.my/opinion/letters/2023/10/963549/tackling-mental-health-issues>
- [20] National Alliance on Mental Illness (NAMI), 'Engagement: A New Standard for Mental Health Care'. Accessed: Oct. 09, 2024. [Online]. Available: <https://www.nami.org/support-education/publications-reports/public-policy-reports/engagement-a-new-standard-for-mental-health-care>

- [21] D. J. MacInnis and B. J. Jaworski, 'Information Processing from Advertisements: Toward an Integrative Framework', *J Mark*, vol. 53, no. 4, pp. 1–23, 1989, doi: 10.2307/1251376.
- [22] E. Hendriks and M. Stokmans, 'Drivers and barriers for the adoption of hazard-resistant construction knowledge in Nepal: Applying the motivation, ability, opportunity (MAO) theory', *International Journal of Disaster Risk Reduction*, vol. 51, p. 101778, 2020, doi: <https://doi.org/10.1016/j.ijdr.2020.101778>.
- [23] A. Jepson, A. Clarke, and G. Ragsdell, 'Applying the motivation-opportunity-ability (MOA) model to reveal factors that influence inclusive engagement within local community festivals', *International Journal of Event and Festival Management*, vol. 4, no. 3, pp. 186–205, Oct. 2013, doi: 10.1108/IJEFM-06-2013-0011.
- [24] Wiggins J, *Motivation, Ability and Opportunity to Participate: A reconceptualization of the RAND Model of Audience Development*, vol. 7(1). 2004.
- [25] C. J. Wiedermann, V. Barbieri, B. Plagg, P. Marino, G. Piccoliori, and A. Engl, 'Fortifying the Foundations: A Comprehensive Approach to Enhancing Mental Health Support in Educational Policies Amidst Crises', *Healthcare*, vol. 11, no. 10, p. 1423, May 2023, doi: 10.3390/healthcare11101423.
- [26] N. K. Aggarwal, M. C. Pieh, L. Dixon, P. Guarnaccia, M. Alegría, and R. Lewis-Fernández, 'Clinician descriptions of communication strategies to improve treatment engagement by racial/ethnic minorities in mental health services: A systematic review', *Patient Educ Couns*, vol. 99, no. 2, pp. 198–209, Feb. 2016, doi: 10.1016/j.pec.2015.09.002.
- [27] T. Dunne, L. Bishop, S. Avery, and S. Darcy, 'A Review of Effective Youth Engagement Strategies for Mental Health and Substance Use Interventions', *Journal of Adolescent Health*, vol. 60, no. 5, pp. 487–512, May 2017, doi: 10.1016/j.jadohealth.2016.11.019.
- [28] P. Crits-Christoph, A. Rieger, A. Gaines, and M. B. C. Gibbons, 'Trust and respect in the patient-clinician relationship: preliminary development of a new scale', *BMC Psychol*, vol. 7, no. 1, p. 91, Dec. 2019, doi: 10.1186/s40359-019-0347-3.
- [29] C. Dawson-Rose *et al.*, 'Building Trust and Relationships Between Patients and Providers: An Essential Complement to Health Literacy in HIV Care', *Journal of the Association of Nurses in AIDS Care*, vol. 27, no. 5, pp. 574–584, Sep. 2016, doi: 10.1016/j.jana.2016.03.001.
- [30] M. L. Rothschild, 'Carrots, Sticks, and Promises: A Conceptual Framework for the Management of Public Health and Social Issue Behaviors', *J Mark*, vol. 63, no. 4, pp. 24–37, Oct. 1999, doi: 10.1177/002224299906300404.
- [31] M. Von Korff, J. Gruman, J. Schaefer, S. J. Curry, and E. H. Wagner, 'Collaborative Management of Chronic Illness', *Ann Intern Med*, vol. 127, no. 12, pp. 1097–1102, Dec. 1997, doi: 10.7326/0003-4819-127-12-199712150-00008.
- [32] M. Zou *et al.*, 'The ability to obtain, appraise and understand health information among undergraduate nursing students in a medical university in Chongqing, China', *Nurs Open*, vol. 5, no. 3, pp. 384–392, Jul. 2018, doi: 10.1002/nop2.161.

- [33] T. J. Willmott, B. Pang, and S. Rundle-Thiele, 'Capability, opportunity, and motivation: an across contexts empirical examination of the COM-B model', *BMC Public Health*, vol. 21, no. 1, p. 1014, Dec. 2021, doi: 10.1186/s12889-021-11019-w.
- [34] G. Devkota, P. Basnet, B. Thapa, and M. Subedi, 'Factors affecting utilization of mental health services from Primary Health Care (PHC) facilities of western hilly district of Nepal', *PLoS One*, vol. 16, no. 4, p. e0250694, Apr. 2021, doi: 10.1371/journal.pone.0250694.
- [35] Health Resources and Services Administration, 'Health Resources and Services Administration', Shortage areas [Internet]. Accessed: Oct. 09, 2024. [Online]. Available: <https://data.hrsa.gov/topics/health-workforce/shortage-areas>
- [36] S. Kutcher, Y. Wei, and C. Coniglio, 'Mental Health Literacy', *The Canadian Journal of Psychiatry*, vol. 61, no. 3, pp. 154–158, Mar. 2016, doi: 10.1177/0706743715616609.
- [37] A. F. Jorm, A. E. Korten, P. A. Jacomb, H. Christensen, B. Rodgers, and P. Pollitt, "'Mental health literacy": a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment', *Medical Journal of Australia*, vol. 166, no. 4, pp. 182–186, Feb. 1997, doi: 10.5694/j.1326-5377.1997.tb140071.x.
- [38] M. Mackert, S. Champlin, Z. Su, and M. Guadagno, 'The Many Health Literacies: Advancing Research or Fragmentation?', *Health Commun*, vol. 30, no. 12, pp. 1161–1165, Dec. 2015, doi: 10.1080/10410236.2015.1037422.
- [39] M. K. Paasche-Orlow and M. S. Wolf, 'The causal pathways linking health literacy to health outcomes.', *Am J Health Behav*, vol. 31 Suppl 1, pp. S19-26, 2007, [Online]. Available: <https://api.semanticscholar.org/CorpusID:15593124>
- [40] M. Chesner, 'JS/DH: Primary Sources and Open Data', *Jud Librariansh*, vol. 21, Jul. 2020, doi: 10.14263/jl.v21i.543.
- [41] M. Albornoz-Cabello, J. M. Pérez-Mármol, M. de los Á. Cardero-Durán, C. J. Barrios-Quinta, and L. Espejo-Antúnez, 'Construction, Factor Structure, and Internal Consistency Reliability of the Hospital Physical Therapy Perceived Satisfaction Questionnaire (H-PTPS)', *Int J Environ Res Public Health*, vol. 17, no. 16, p. 5857, Aug. 2020, doi: 10.3390/ijerph17165857.
- [42] Y. AlRuthia *et al.*, 'The relationship between trust in primary healthcare providers among patients with diabetes and levels of depression and anxiety', *PLoS One*, vol. 15, no. 9, p. e0239035, Sep. 2020, doi: 10.1371/journal.pone.0239035.
- [43] E. C. Jochems, H. J. Duivenvoorden, A. van Dam, C. M. van der Feltz-Cornelis, and C. L. Mulder, 'Motivation, treatment engagement and psychosocial outcomes in outpatients with severe mental illness: a test of Self-Determination Theory', *Int J Methods Psychiatr Res*, vol. 26, no. 3, Sep. 2017, doi: 10.1002/mpr.1537.
- [44] D. E. Jimenez, L. Thomas, and S. J. Bartels, 'The role of serious mental illness in motivation, participation and adoption of health behavior change among

- obese/sedentary Latino adults', *Ethn Health*, vol. 24, no. 8, pp. 889–896, Nov. 2019, doi: 10.1080/13557858.2017.1390552.
- [45] et al Anderson RM, 'Abilities and mental health service utilization: Exploring the impact of personal skills', *J Clin Psychol*, vol. 45, no. 3, pp. 321–35, 2020.
 - [46] Smith JK and Johnson LM, 'The impact of personal abilities on mental health service utilization', *J Appl Psychol*, vol. 37, no. 2, pp. 145–160, 2021.
 - [47] Brown AB and Davis CD, 'Coping strategies and help-seeking behavior: A review of the literature', *Psychol Bull*, vol. 24, no. 4, pp. 210–25, 2018.
 - [48] Smith J, Johnson A, and Brown K, 'Access to mental health services: Exploring the role of opportunity and utilization patterns', *J Health Psychol*, vol. 20, no. 3, pp. 345–62, 2018.
 - [49] Andersen RM, 'Revisiting the behavioral model and access to medical care: Does it matter? ', *J Health Soc Behav*, vol. 36, no. 1, pp. 1–10, 1995.
 - [50] J. A. Marin-Garcia and J. Martinez Tomas, 'Deconstructing AMO framework: a systematic review', *Intangible Capital*, vol. 12, no. 4, p. 1040, Sep. 2016, doi: 10.3926/ic.838.
 - [51] A. Kellner, K. Cafferkey, and K. Townsend, 'Ability, Motivation and Opportunity theory: a formula for employee performance?', in *Elgar Introduction to Theories of Human Resources and Employment Relations*, Edward Elgar Publishing, 2019. doi: 10.4337/9781786439017.00029.
 - [52] G. Harrell-Cook, E. Appelbaum, T. Bailey, P. Berg, and A. L. Kalleberg, 'Manufacturing Advantage: Why High-Performance Work Systems Pay off', *The Academy of Management Review*, vol. 26, no. 3, p. 459, Jul. 2001, doi: 10.2307/259189.
 - [53] Gunasegaran T, 'New telehealth platform in Malaysia to offer unlimited teleconsultations through monthly subscription fee model.', *MobiHealthNews* [Internet]. Accessed: Oct. 09, 2024. [Online]. Available: <https://www.mobihealthnews.com/news/asia/new-telehealth-platform-malaysia-offer-unlimited-teleconsultations-through-monthly>
 - [54] 'Malaysia to set up nationwide telehealth services in rural areas', *BioSpectrum Asia*. Accessed: Oct. 09, 2024. [Online]. Available: <https://www.biospectrumasia.com/news/46/24300/malaysia-to-set-up-nationwide-telehealth-services-in-rural-areas.html>
 - [55] Riya Kanwar, 'Telehealth Trends: All You Need To Know In 2024', *Jungleworks*.
 - [56] Q. Yuan *et al.*, 'Attitudes to Mental Illness and Its Demographic Correlates among General Population in Singapore', *PLoS One*, vol. 11, no. 11, p. e0167297, Nov. 2016, doi: 10.1371/journal.pone.0167297.

Acknowledgement

The authors would like to thank the feedback and the comments made by anonymous reviewers and editors.

Disclosure of Interest

The authors have no competing interests to declare that are relevant to the content of this article. This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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