Research Article

EDUCATIONAL POINT
An International Peer-Reviewed Journal

https://www.educationalpoint.net
ISSN: 3062-1011 (Online)

Developing a Comprehensive Questionnaire for Measuring Mental Health Literacy among Students: A Structural Equation Modeling Approach

Frematívo A. Vergara [1*], Evan P. Taja-on [1]

[1] San Isidro College, Philippines, PHILIPPINES
* Correspondence: fvergara@sic.edu.ph

CITATION: Vergara, F. A., & Taja-on, E. P. (2026). Developing a Comprehensive Questionnaire for Measuring Mental Health Literacy among Students: A Structural Equation Modeling Approach. *Educational Point*, *3*(1), e151. https://doi.org/10.71176/edup/18426

ARTICLE INFO

Received: 21 January 2026
Accepted: 17 March 2026

OPEN ACCESS

ABSTRACT

Understanding mental health literacy is essential in equipping students with the knowledge and confidence to manage mental health concerns effectively. A structured survey-based approach was implemented to examine key dimensions of mental health literacy among secondary and post-secondary students in Bukidnon, Philippines. The study involved 3,397 legally aged students from secondary and post-secondary institutions, with most participants enrolled in undergraduate programs. Using validated measurement procedures, the findings confirm that mental health literacy is shaped by awareness of resources, help-seeking behavior, perceived stigma, self-efficacy in managing mental health, and cultural influences. Each dimension demonstrated stable measurement properties and meaningful relationships within the overall model. The developed questionnaire provides a reliable and multidimensional tool for assessing literacy patterns within academic settings. By identifying strengths and gaps across these domains, the instrument offers a structured basis for designing interventions that strengthen awareness, reduce stigma, promote help-seeking, and support student well-being within similar educational contexts.

Keywords: mental health; mental health literacy; questionnaire development; students; structural equation modeling

INTRODUCTION

Background of the Study

Mental health literacy has become essential in promoting overall well-being among students. With increasing academic pressures, social challenges, and personal responsibilities, many students experience mental

health difficulties that remain unaddressed due to a lack of awareness and understanding (Foulkes & Andrews, 2023). Ensuring individuals have the necessary knowledge and skills to recognize and manage mental health concerns is vital in fostering a supportive and proactive learning environment (Javed et al., 2021). As society continues to emphasize mental health as a crucial aspect of holistic development, assessing how well students comprehend and engage with mental health-related concepts becomes increasingly important (Spiker & Hammer, 2019).

Mental health literacy enables individuals to recognize, understand, and respond to mental health challenges effectively. It encompasses knowledge of mental disorders, their symptoms, and available treatment options, ultimately contributing to early diagnosis and intervention (Furnham & Swami, 2018). Research indicates that individuals with low mental health literacy often misinterpret symptoms or attribute them to personal weaknesses (Bizzotto et al., 2023; Cheng et al., 2018; Cormier et al., 2020), leading to delays in seeking appropriate care (Ratnayake & Hyde, 2019). Enhancing mental health literacy among students is crucial, as this demographic is at a heightened risk of experiencing mental health issues due to academic pressures and transitional life stages (Nobre et al., 2021; Seeaket et al., 2020).

Raising awareness of mental health resources is fundamental to ensuring individuals receive timely and appropriate support (Lee et al., 2023). Many students are unaware of the mental health services available to them (LaMontagne et al., 2023), resulting in the underutilization of counseling centers (Alvarez-Hernandez et al., 2024), helplines (Hughes-Barton et al., 2025), and peer support programs (Turuba et al., 2023). Studies have shown that students more informed about these resources are more likely to seek professional help when needed. Ensuring easy access to mental health information through university programs, online platforms, or community initiatives can help bridge the gap between awareness and action (Marrero, 2019; Davis-Bordovsky, 2022; Foulkes & Andres, 2023).

Furthermore, help-seeking behavior plays a significant role in mental health management, influencing whether individuals access professional support when needed (Bryant et al., 2022; Teo et al., 2022). Many factors contribute to the decision to seek help, including personal attitudes (Tesfaye et al., 2020), perceived support systems (Hadad, 2026), and prior experiences with mental health care (Shahwan et al., 2020). Research suggests that students often hesitate to seek help due to fear of being judged or concerns about confidentiality (Stunden et al., 2020). Encouraging a culture of open dialogue about mental health can reduce these barriers and normalize the act of seeking support (Zhou et al., 2022).

Perceived stigma remains one of the most significant obstacles to addressing mental health concerns effectively (Yu et al., 2021). The fear of being labeled as weak or incapable discourages individuals from discussing their mental health struggles openly (Vidourek & Burbage, 2019; Willemse et al., 2023). Studies indicate that stigma affects an individual's willingness to seek professional help and their perception of mental health care in general (Carrara et al., 2019; Guarneri et al., 2019; Schomerus et al., 2019). Reducing stigma requires a multifaceted approach, including education, awareness campaigns, and personal testimonies that challenge misconceptions (Waqas et al., 2020; Walsh & Foster, 2021).

Self-efficacy in managing mental health refers to an individual's belief in coping with psychological challenges effectively (Schönfeld et al., 2019). Higher levels of self-efficacy are associated with better stress management (Terp et al., 2019), improved coping mechanisms (Morales-Rodríguez & Pérez-Mármol, 2019), and a greater likelihood of seeking professional assistance when necessary (Schomerus et al., 2019). Students with high self-efficacy possess a powerful internal resource that enables them to navigate the inevitable challenges of academic life and personal development with greater confidence and resilience. They have confidence in their abilities to overcome obstacles (Lean et al., 2019; Lian et al., 2020).

Additionally, cultural influences play a crucial role in shaping perceptions and responses to mental health issues. In many cultures, mental health is viewed through a lens of tradition (Ran et al., 2021), spirituality

(Nguyen, 2020), or community dynamics (Cook et al., 2019), which can either facilitate or hinder help-seeking behaviors (Ungar & Therom, 2020; Misra et al., 2021). Some cultural beliefs encourage collective support, where family and community play a central role in addressing mental health concerns (Byrow et al., 2020). Conversely, in cultures where discussing mental health is considered taboo, individuals may experience additional barriers to accessing care (Chatmon, 2020). Understanding these cultural intricacies is essential in developing respectful, inclusive interventions tailored to students' diverse needs (Jiang et al., 2019).

The growing concern over mental health issues among students highlights the need for practical tools to measure their understanding and access to mental health information (Philpott, 2022). Many individuals struggle to identify mental health symptoms or seek professional help due to stigma, misinformation, or a lack of accessible resources. Without proper assessment methods, it is difficult to determine the extent of students' mental health literacy and address the barriers that prevent them from seeking support. Addressing this issue requires the development of reliable and comprehensive measures that accurately capture students' knowledge, attitudes, and behaviors related to mental health.

Research Gap and Objective of the Study

Despite continued efforts to strengthen mental health awareness, assessment practices in the local context remain narrow and fragmented. Most tools used with students focus primarily on basic knowledge of mental health conditions and general attitudes, often relying on brief screening instruments or adapted scales (Flores et al., 2025; Vergara & Taja-on, 2025). While these measures are helpful in identifying surface-level awareness, they provide limited understanding of how students recognize and access support services, manage their own mental health, or respond to social and cultural influences. Many instruments show strong reliability in identifying mental health concerns but give little attention to help-seeking behavior, perceived stigma, or students' confidence in handling mental health challenges, with cultural factors frequently overlooked or only indirectly addressed (Carrara et al., 2019; Byrow et al., 2020; Nobre et al., 2021). These gaps mean that key aspects of students' lived experiences are not fully captured, reducing the value of findings for developing responsive and context-sensitive interventions. Recognizing these limitations highlights the need for a more integrated assessment approach that brings together these interconnected dimensions and more accurately reflects how students experience and navigate mental health in their daily lives.

To address this need, a structured approach is required to create a tool that effectively evaluates mental health literacy among students. The primary aim is to establish a reliable and valid instrument and self-efficacy in managing mental health. By employing a systematic approach, it is possible to ensure that the tool captures relevant information, leading to more informed policies and programs that enhance students' well-being. This effort will contribute to developing a supportive academic environment where mental health literacy is prioritized and effectively integrated into educational frameworks, in line with the provisions of the Republic Act No. 11036 (Philippine Mental Health Act).

As depicted in **Figure 1**, the hypothesized structural measurement model presents a framework linking various constructs to mental health literacy. The model suggests that awareness of mental health resources (AMHR), help-seeking behavior (HSB), perceived stigma regarding mental health (PSRMH), self-efficacy in managing mental health (SEMMH), and cultural influences on mental health (CIMH) collectively shape an individual's mental health literacy (MHL). The interrelationships among these factors reflect a holistic approach to understanding how students engage with mental health concepts and services. The structural pathways provide a theoretical basis for interventions to enhance mental health literacy through targeted educational and support programs. The study's effort aims to test the factorial structure of the scale and obtain evidence of its validity and reliability. Specifically, the study led to the development of the study question:

- What factors collectively shape mental health literacy?

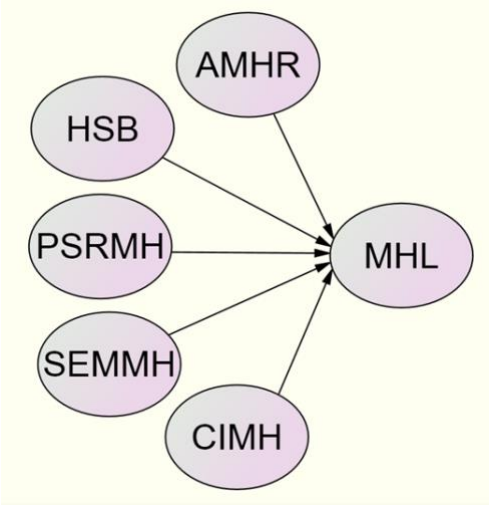

Figure 1. Hypothesized Structural Measurement Model (Source: Author's design, 2026)

METHOD

Research Design and Sample

The study employed a descriptive research design (Kline, 2023) to assess students' mental health literacy systematically. This design allowed for an in-depth analysis of the different dimensions of mental health literacy, including awareness, help-seeking behaviors, stigma perception, self-efficacy, and cultural influences. By utilizing this approach, the study collected quantitative data that comprehensively explored students' knowledge and attitudes toward mental health.

The study was conducted in Bukidnon, Philippines, providing an important regional context for interpreting the findings. Participants were drawn from secondary and post-secondary institutions within this area, with respondents ranging from high school to graduate level. Although the sample included students across educational stages, the majority of voluntary participants were undergraduates, representing 67.5% of the final sample. This distribution reflects the higher enrollment concentration at the undergraduate level within participating institutions and should be considered when interpreting the overall patterns. The presentation of **Tables 1** and **2** clarifies the demographic spread and situates the results within the local academic setting.

Recruitment was carried out through institutional coordination and online dissemination of the survey link within participating schools. Students were invited to participate voluntarily through official communication channels, and the questionnaire was administered online to allow access across different campuses and year levels. Data collection was conducted over a four-month survey period during the Academic Year 2024–2025, and responses were gathered through a secure online platform. The initial screening ensured that only legally aged individuals who were currently enrolled in an academic institution and who provided informed consent were included. Individuals below 18 years old, those not currently studying, or those who did not agree to participate were automatically excluded from the dataset. A total of 3,493 responses were recorded, of which 3,397 complete responses were retained after data cleaning (Ganti & Sarma, 2022).

The diversity reflected in age, sex, educational background, and household income was not incidental but essential to examining the stability and applicability of the questionnaire across groups. Presenting these characteristics allowed the study to demonstrate that the data were drawn from students with varied social

Table 1. Demographic profile of the respondents (N=3397)

Demographic	N		%
Age	18-21	2014	59.29
	22-25	784	23.08
	26-29	485	14.28
	30 and Older	114	3.36
Sex	Male	1489	43.83
	Female	1908	56.17
Educational Level	High School	487	14.34
	Undergraduate	2293	67.50
	Graduate	498	14.66
	Postgraduate	12	0.35
	Others	107	3.15
House Hold Income	Low	1857	54.67
	Middle	962	28.32
	High	578	17.02

Table 2. Mental health-related experience of the respondents (N=3397)

Experience	Yes		No	
	N	%	N	%
Mental Health Education/Training	944	27.79	2453	72.21
Mental Health Diagnosis	39	1.15	3358	98.85
Family History of Mental Health Issues	113	3.33	3284	96.67
Sought Professional Mental Health Support	522	15.37	2875	84.63
Access to Mental Health Services	1041	30.64	2356	69.36

and educational contexts, supporting the interpretation that the resulting measurement structure was not limited to a narrow subgroup. The distribution of respondents across these categories ensures that the findings reflect a broad spectrum of students, making the results more applicable to different subgroups.

In examining the mental health-related experiences, it is evident that a significant portion of respondents lack prior exposure to formal mental health education or training. The low percentage of individuals with a diagnosed mental health condition suggests either an underreporting issue or a potential gap in mental health awareness and access to professional support. The proportion of students who have sought professional mental health services remains limited. The access to mental health services further emphasizes this concern, as most respondents reported limited availability.

Development of Mental Health Literacy Questionnaire

The questionnaire was originally developed for this study and was not adapted from any existing scale. All items were written by the research team based on the defined dimensions and their relevance to student experiences within the local educational context. While general mental health literacy domains reported in prior literature informed the conceptual framing of the dimensions, no specific instruments were copied, modified, or directly adopted. Each statement was constructed to reflect observable behaviors, attitudes, and perceptions related to awareness of resources, help-seeking behavior, perceived stigma, self-efficacy, and cultural influence.

The development of the questionnaire followed a structured and transparent process to ensure clarity and consistency in item selection. An initial pool of 75 items was generated, with 15 items written for each of the five proposed dimensions: awareness of mental health resources, help-seeking behavior, perceived stigma, self-efficacy in managing mental health, and cultural influence on mental health. These items were designed to reflect practical and context-based student experiences. Prior to full-scale data collection, all 75 items were pilot tested with 100 respondents drawn from the target student population. The pilot testing produced a Cronbach's alpha of 0.879, indicating strong internal consistency of the preliminary instrument. Item-level

feedback and reliability results were reviewed to identify statements that required minor wording refinements for clarity before proceeding to large-scale administration. After incorporating these adjustments, the revised 75-item set was administered during the main data collection phase, allowing the subsequent analyses to determine which items demonstrated stable and meaningful response patterns.

Item reduction was conducted through factor analysis using clearly defined statistical criteria. Items were retained if they demonstrated a primary factor loading of at least 0.50 on their intended dimension, had communalities of 0.40 or higher, and did not show substantial cross-loadings of 0.30 or above on other factors. Items that failed to meet these thresholds were removed sequentially rather than in a single batch process. After each round of analysis, the factor structure was re-examined to ensure that the removal of an item improved clarity and did not distort the conceptual balance of the dimension. Through this systematic and stepwise refinement, 36 items were eliminated, resulting in a final set of 39 items that demonstrated stable loadings and clear alignment with their respective constructs. The retained items were distributed across the five dimensions as follows: eight items for awareness of mental health resources, seven items for help-seeking behavior, nine items for perceived stigma regarding mental health, seven items for self-efficacy in managing mental health, and eight items for cultural influence on mental health.

The refined structure was then evaluated to confirm that the retained items formed coherent and interpretable dimensions. The final 39-item instrument demonstrated consistent factor patterns and acceptable model fit, indicating that the reduction process strengthened both statistical stability and conceptual clarity. While the initial design began with an equal number of items across the five dimensions, the item reduction process did not aim to preserve equal counts. Instead, items were retained based solely on their statistical performance and conceptual alignment with the constructs. This approach ensured that the final instrument reflects the most stable and meaningful indicators for each dimension rather than maintaining a predetermined numerical balance.

Response Scale and Item Structure

The questionnaire was designed using a structured Likert-type response format to ensure consistent measurement across all dimensions of mental health literacy. Each item was rated using a 7-point Likert scale, where 7 represents "*Strongly Agree,*" and 1 represents "*Strongly Disagree*." This format allowed respondents to indicate varying degrees of agreement with each statement related to mental health awareness, attitudes, and behaviors. Several negatively worded items were included in the instrument and were reverse-coded during data processing to maintain consistent interpretation across constructs. This procedure ensured that higher scores consistently reflected stronger awareness of mental health resources, greater willingness to seek help, lower perceived stigma, higher self-efficacy in managing mental health, and more supportive cultural influences related to mental health.

The instrument consisted of five dimensions that capture different aspects of mental health literacy: awareness of mental health resources, help-seeking behavior, perceived stigma regarding mental health, self-efficacy in managing mental health, and cultural influences on mental health. Example items from each dimension include statements such as "*I am aware of the mental health services available at my school or community*" for awareness of resources, "*I am willing to talk to a mental health professional if I experience emotional distress*" for help-seeking behavior, "*I feel ashamed to admit if I have mental health challenges*" for perceived stigma, "*I can recognize when I am feeling mentally overwhelmed and take steps to manage it*" for self-efficacy, and "*My cultural background influences how I view mental health and seeking help*" for cultural influence. These items illustrate how the instrument captures both knowledge and attitudes related to mental health while reflecting practical experiences commonly encountered by students in academic settings. Together with the standardized response scale, this structure provides a clear and interpretable framework for assessing mental health literacy across the identified dimensions.

Data Gathering and Management

Data were collected through a structured online questionnaire designed to measure key aspects of mental health literacy. After the survey period ended, the dataset underwent systematic screening and cleaning to ensure accuracy and completeness (Ganti & Sarma, 2022). A total of 3,493 responses were initially recorded. Upon review, 96 responses were identified as incomplete because substantial portions of the questionnaire were unanswered. These cases represented approximately 2.75% of the total recorded entries and were removed prior to analysis. The remaining 3,397 responses constituted the final dataset used for statistical procedures. This step ensured that only fully completed questionnaires were included in the factor and structural analyses.

Following the removal of incomplete entries, the dataset was examined for item-level missing values. The frequency of missing responses within the retained cases was minimal and fell within an acceptable range. To determine whether the remaining missing values occurred randomly, a test of missing completely at random (MCAR) was conducted where $\chi^2(df) = 45.32$ and $p = 0.218$. The results indicated that the pattern of missingness was random and did not systematically affect specific variables. These procedures ensured that the final analyses were conducted using a clean and statistically appropriate dataset.

Data Analysis

Factor analysis was employed to examine how the questionnaire items grouped together and how the different components of mental health literacy were structured. The data were first screened and analyzed using SPSS to determine whether they were suitable for factor analysis. Sampling adequacy was assessed using the Kaiser-Meyer-Olkin measure (Shrestha, 2021), and the strength of inter-item correlations was evaluated through Bartlett's test of sphericity (Ridwanullahi et al., 2025). The results indicated that the data met acceptable standards for factorability, confirming that the correlation matrix contained sufficient shared variance to justify proceeding with factor extraction. Communalities and correlation patterns were also reviewed to ensure that the items demonstrated meaningful relationships with one another.

Once suitability was established, factors were extracted based on eigenvalues, scree plot inspection, and the interpretability of item groupings. Items were retained if they demonstrated strong and consistent loadings on their intended factors and minimal cross-loadings on unrelated constructs. This step ensured that each retained item contributed clearly to a single underlying dimension, resulting in a coherent and interpretable structure. The refined factor structure was then tested using SPSS AMOS to evaluate how well the measurement model fit the observed data. Model fit indices supported the adequacy of the structure, indicating that the retained factors appropriately represented awareness, help-seeking behavior, perceived stigma, self-efficacy, and cultural influence.

After confirming the measurement structure, the relationships among the latent constructs were examined within the structural framework. Standardized path coefficients, critical ratios, and probability values were used to assess the strength and significance of each relationship. The results showed that self-efficacy and help-seeking behavior were among the strongest contributors, while awareness, stigma, and cultural influence also demonstrated meaningful effects. This systematic process—from testing data suitability, extracting interpretable factors, validating the measurement structure, and examining structural paths—ensured that the findings are transparent, replicable, and grounded in sound analytical procedures.

RESULTS

Table 3 presents the confirmatory factor analysis results, which assess the reliability and validity of the constructs used in the study. The standardized factor loadings indicate the strength of the relationship between

Table 3. Summary of the confirmatory factor analysis

Variable	Label	SFL	R^2	Composite Reliability	AVE	MSV	ASV	Convergent Validity
AMHR	AMHR1	0.75	0.57	0.95	0.74	0.23	0.14	Yes
	AMHR3	0.87	0.71					
	AMHR4	0.92	0.81					
	AMHR7	0.92	0.86					
	AMHR10	0.79	0.55					
	AMHR11	0.82	0.69					
	AMHR13	0.90	0.77					
	AMHR15	0.79	0.58					
HSB	HSB2	0.85	0.71	0.92	0.66	0.25	0.16	Yes
	HSB3	0.88	0.77					
	HSB4	0.87	0.75					
	HSB5	0.92	0.80					
	HSB7	0.81	0.69					
	HSB9	0.85	0.77					
	HSB12	0.83	0.69					
PSRMH	PSRMH2	0.93	0.82	0.95	0.73	0.27	0.16	Yes
	PSRMH3	0.77	0.59					
	PSRMH5	0.88	0.68					
	PSRMH7	0.82	0.62					
	PSRMH10	0.76	0.59					
	PSRMH11	0.75	0.52					
	PSRMH12	0.90	0.81					
	PSRMH14	0.85	0.76					
	PSRMH15	0.83	0.72					
SEMMH	SEMMH1	0.89	0.76	0.96	0.71	0.22	0.18	Yes
	SEMMH3	0.85	0.76					
	SEMMH6	0.88	0.63					
	SEMMH7	0.85	0.74					
	SEMMH8	0.91	0.80					
	SEMMH10	0.81	0.63					
	SEMMH14	0.82	0.77					
CIMH	CIMH1	0.88	0.71	0.94	0.69	0.24	0.15	Yes
	CIMH3	0.82	0.67					
	CIMH4	0.79	0.55					
	CIMH5	0.90	0.79					
	CIMH7	0.90	0.82					
	CIMH8	0.87	0.75					
	CIMH13	0.85	0.71					
	CIMH15	0.83	0.74					

the observed variables and their respective latent constructs. In this study, the latent constructs refer to the underlying dimensions measured by the questionnaire, namely awareness of mental health resources, help-seeking behavior, perceived stigma regarding mental health, self-efficacy in managing mental health, and cultural influence on mental health. Additionally, the values for composite reliability and average variance extracted confirm the internal consistency of the constructs, ensuring that the measurement model accurately represents the underlying factors.

The confirmatory factor analysis results establish the reliability and validity of the constructs used in the study, as presented in **Table 3**. The standardized factor loadings indicate strong correlations between the observed variables and their respective latent constructs (awareness of mental health resources, help-seeking behavior, perceived stigma regarding mental health, self-efficacy in managing mental health, and cultural influence on mental health), confirming the robustness of the measurement model. Composite reliability values exceed the

accepted point, reinforcing the internal consistency of the factors. The average variance extracted (AVE) values further validate that the constructs adequately capture the variance of their indicators. Moreover, the discriminant validity measures suggest that each construct is distinct, allowing for a meaningful interpretation of their relationships within the model.

Table 3 presents the measurement results for awareness of mental health resources. The standardized factor loadings show strong relationships between the observed items and the underlying construct, indicating that the selected indicators effectively represent students' knowledge of available services and sources of support. The model fit indices further confirm that the structure is statistically acceptable and stable within the sample. These findings suggest that awareness is a clearly defined and measurable component, reinforcing its importance within the broader framework of mental health literacy.

Building on this, **Table 3** also reports the measurement properties for help-seeking behavior. The factor loadings demonstrate that the retained items consistently capture students' willingness and tendencies to seek professional or institutional support when facing mental health concerns. The acceptable model fit indices indicate that the construct is well-structured and meaningfully represented by its indicators. The results highlight that help-seeking behavior functions as a distinct yet related dimension, underscoring the need for institutional efforts that encourage students to access available support systems.

In addition, **Table 3** outlines the measurement results for perceived stigma regarding mental health. The factor loadings indicate that the items reliably reflect stigma-related perceptions and attitudes that may hinder openness or service utilization. The construct achieved satisfactory model fit, confirming that stigma is empirically distinguishable from other dimensions within the model. These findings demonstrate that stigma remains a measurable factor influencing how students interpret and respond to mental health concerns.

The table further presents the measurement structure for self-efficacy in managing mental health. The standardized loadings reveal strong associations between the observed variables and the underlying construct, indicating that the items effectively capture students' confidence in handling emotional challenges and stress. Model fit indicators support the adequacy of this dimension within the overall framework. The results affirm that self-efficacy is a central and stable component, contributing significantly to how students understand and manage their mental well-being.

Finally, **Table 3** reports the measurement findings for cultural influence on mental health. The factor loadings demonstrate that the items consistently represent beliefs, norms, and shared understandings that shape students' perspectives on mental health. The model fit indices confirm that this construct is appropriately defined and statistically supported within the structure. Together, these five dimensions—awareness, help-seeking behavior, perceived stigma, self-efficacy, and cultural influence—form a coherent and empirically supported measurement model that captures multiple aspects of students' mental health literacy.

Table 4 presents the model fit indices for the different measurement models, summarizing the statistical parameters used to evaluate their accuracy. The values for chi-square, RMSEA, CFI, TLI, and other fit indices confirm whether each construct aligns with the observed data. The results indicate that the models fit well, supporting the validity of the measurement framework.

The model fit indices, as presented in **Table 4**, provide critical insights into the adequacy of the measurement models. Across the constructs, the chi-square values suggest statistically significant models, which is expected given the large sample size. However, alternative fit indices such as AGFI, CFI, and RMSEA indicate a strong model fit, with values aligning with established points. The root mean square error of approximation (RMSEA) values remain within acceptable limits, further affirming the model's validity. The comparative fit index (CFI) and Tucker-Lewis index (TLI) values support the argument that the measurement model is well-structured

Table 4. Measurement of model of different constructs

Variable	AMHR	HSB	PSRMH	SEMMH	CIMH
χ^2	2119.68	2178.19	2269.51	2195.77	2297.34
AGFI	0.921	0.913	0.956	0.927	0.923
CFI	0.974	0.957	0.955	0.963	0.954
RMSE	0.034	0.045	0.031	0.050	0.043
95% CI	[0.025,0.061]	[0.023.0.057]	[0.022,0.059]	[0.026,0.062]	[0.022,0.060]
CMIN/df	2.657	2.436	2.913	2.685	2.456
NFI	0.912	0.925	0.917	0.908	0.920
IFI	0.961	0.967	0.942	0.963	0.955
TLI	0.922	0.953	0.955	0.937	0.939
AIC	93187.23	92357.30	91131.24	93571.78	89589.36
BIC	93732.37	93997.14	92884.64	93937.29	92284.43
ABIC	93248.07	93288.43	92160.13	93857.42	91839.57

and appropriately represents the data. The information criteria, including AIC and BIC, provide additional evidence of model parsimony.

Figure 2 displays the structural model, integrating all constructs into a comprehensive framework explaining the key variables' relationships. The diagram presents the standardized path coefficients, illustrating how different dimensions contribute to mental health literacy. The statistical validation ensures that the proposed model effectively represents the interactions among the constructs.

Figure 2 presents the structural model, integrating all the constructs into a comprehensive framework for mental health literacy. The path coefficients demonstrate the strength of relationships among the variables, with self-efficacy and help-seeking behavior emerging as key determinants. The model fit indices confirm that the structural model provides a reliable data representation. These results suggest that improving mental health literacy requires a multifaceted approach that enhances awareness, reduces stigma, promotes help-seeking behavior, and considers cultural influences. Addressing these factors collectively can lead to a more informed and supportive student community.

Table 5 summarizes the standardized effects from the structural model, presenting the estimated path coefficients, standard errors, and significance levels. The values indicate the strength and direction of relationships between the constructs, identifying the most influential factors in shaping mental health literacy. The results provide a basis for understanding the key determinants and their impact within the framework.

The standardized path coefficients, as presented in **Table 5**, confirm the significant relationships between the latent constructs and mental health literacy. The highest path coefficient suggests a particularly strong influence of self-efficacy in managing mental health on overall literacy. The role of help-seeking behavior and cultural influence in mental health also emerges as a critical determinant. The statistical significance of these paths, supported by the critical ratios and p-values, validates the hypothesized relationships. These findings underscore the multifaceted nature of mental health literacy, emphasizing the need for interventions targeting various aspects, including awareness, stigma reduction, and self-efficacy enhancement.

Table 5. Standardized effects from the result of the structural model

Path	β	SE	CR	Path Coefficient	t	p-value
AMHR → MHL	0.425	0.081	6.911	0.62	12.53	<0.001
HSB → MHL	0.461	0.076	6.782	0.58	11.32	0.009
PSRMH → MHL	0.334	0.078	6.850	0.52	12.26	<0.001
SEMMH → MHL	0.446	0.075	6.798	0.65	13.76	0.005
CIMH → MHL	0.435	0.080	6.892	0.58	11.63	<0.001

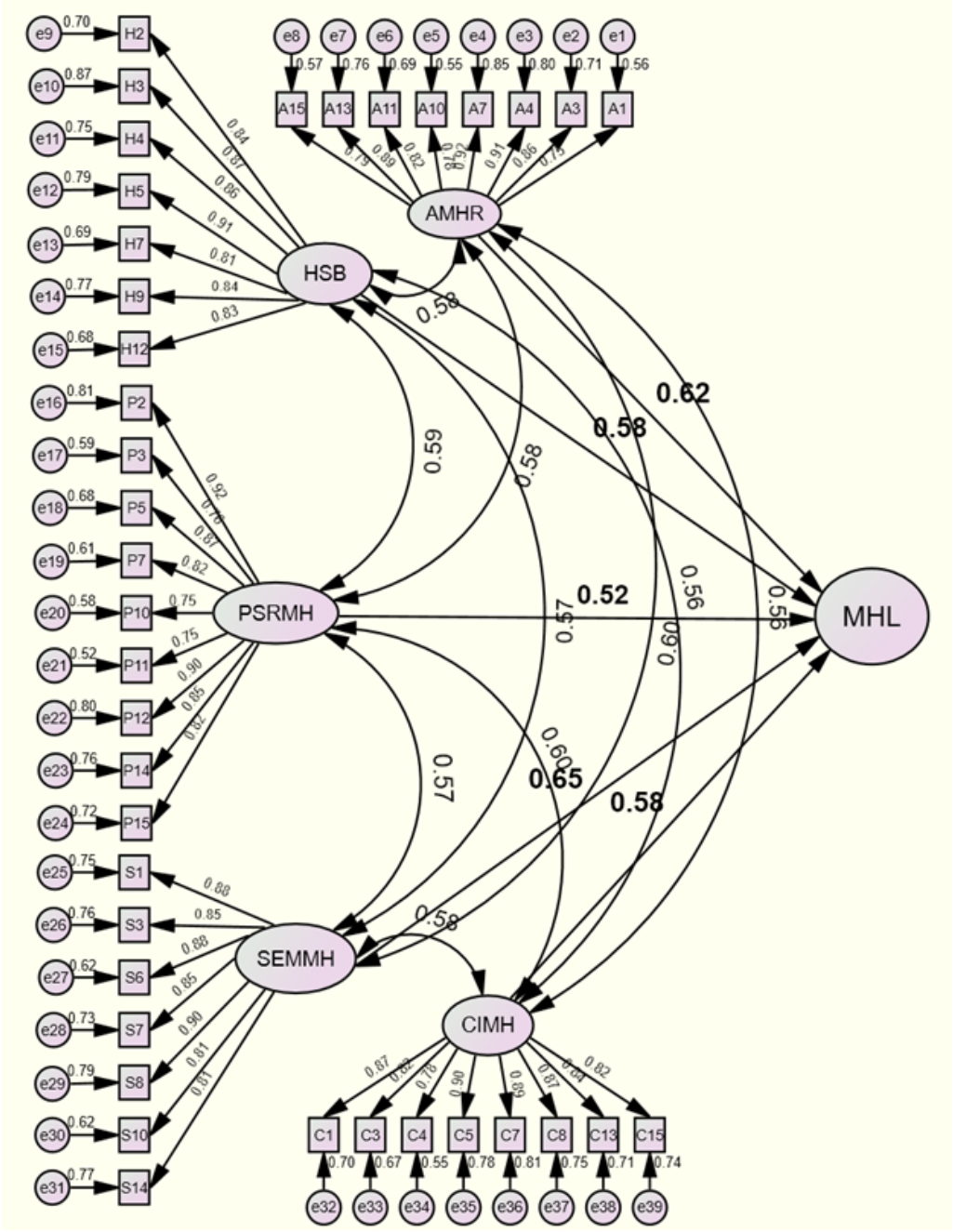

Figure 2. Structural model (Source: The authors)

DISCUSSION

Awareness of Mental Health Resources to Mental Health Literacy

Awareness of mental health resources plays a crucial role in improving mental health literacy, as it enables individuals to recognize available support systems and seek help when needed (Marrero, 2019; Lee et al., 2023). The findings confirm that awareness is a significant component, with strong factor loadings supporting

its validity. The statistical results indicate that individuals with higher awareness levels demonstrate better understanding and engagement with mental health information. The overall model fit supports the reliability of this construct, emphasizing that increasing awareness contributes positively to overall mental health literacy.

The results further highlight that individuals more knowledgeable about mental health resources are more likely to take proactive steps to manage their well-being (Turuba et al., 2023). A strong and positive relationship was observed, suggesting that the more accessible and visible these resources are, the more likely individuals are to utilize them. Additionally, the findings confirm that awareness influences individuals' confidence in seeking help and engaging in discussions about mental health (Alvarez-Hernandez et al., 2024).

The statistical relationships also suggest that limited awareness can be a barrier, preventing individuals from accessing available support systems (LaMontagne et al., 2023). The findings highlight the need for institutions and communities to prioritize disseminating mental health information through accessible and engaging platforms (Hughes-Barton et al., 2025). Improving awareness is about providing information and ensuring that individuals perceive these resources as reliable and beneficial. These results reinforce the importance of structured and sustained awareness initiatives to promote a more informed and proactive approach to mental health (Davis-Bordovsky, 2022; Foulkes & Andres, 2023).

The present findings are consistent with prior mental health literacy frameworks that position knowledge of available services as a foundational component of literacy (Flores et al., 2025; Vergara & Taja-on, 2025). Similar to existing mental health literacy tools, which include knowledge of professional help and information sources as core domains, the current results show that awareness of mental health resources demonstrated strong factor loadings and a significant structural relationship with overall literacy. Within this broader demographic composition, awareness remained a stable and well-defined construct, suggesting that knowledge of services functions consistently across varied academic stages. The findings align with prior research while also extending it by demonstrating that awareness retains its central role even within a diverse student population drawn from a specific regional context.

Help-Seeking Behavior to Mental Health Literacy

Help-seeking behavior is a key factor in mental health literacy, reflecting an individual's willingness and confidence to access professional support when needed (Zhou et al., 2022). The findings indicate a strong relationship between help-seeking behavior and overall mental health literacy, confirming that individuals seeking help tend to understand mental health concepts better (Bryant et al., 2022). The results also highlight that those who demonstrate positive attitudes toward seeking help are more likely to recognize symptoms of mental health concerns and take appropriate action. The statistical validation of this relationship reinforces the importance of fostering a culture where seeking mental health support is normalized and encouraged.

The analysis further suggests that students more willing to seek professional help exhibit greater confidence in managing their mental well-being. The findings show that help-seeking behavior increases engagement with mental health education and awareness programs (Teo et al., 2022; Hadad, 2026). This highlights the significance of accessible mental health services and supportive environments encouraging students to seek assistance without fear of judgment (Stunden et al., 2020). The positive association between help-seeking behavior and mental health literacy suggests that when students feel supported in seeking help, they are more likely to develop a deeper understanding of mental health resources and strategies.

Despite the positive correlation, the findings also indicate that barriers to mental health services may prevent individuals from seeking help. Addressing these barriers through targeted initiatives can help improve help-seeking behaviors and, in turn, enhance mental health literacy (Tesfaye et al., 2020; Shahwan et al., 2020). By promoting a culture that values and encourages seeking professional assistance, students can be better equipped to manage their mental well-being effectively.

The present findings align with established mental health literacy frameworks that identify help-seeking intentions and attitudes as core components of literacy (Flores et al., 2025; Vergara & Taja-on, 2025). Similar to the existing tools, which include willingness to seek professional support as an essential domain, the current results demonstrate that help-seeking behavior showed strong factor loadings and a significant relationship with overall literacy. This supports prior research while also extending it by showing that the connection between help-seeking behavior and mental health literacy holds within a diverse academic population in a specific regional setting.

Perceived Stigma Regarding Mental Health to Mental Health Literacy

Perceived stigma regarding mental health has a significant influence on individuals' willingness to seek help and engage with mental health resources (Walsh & Foster, 2021). The findings confirm that stigma negatively affects mental health literacy, meaning that individuals who hold stigmatized views are less likely to seek information or assistance for mental health concerns. The results indicate that when stigma is present, individuals may avoid discussions about mental health, leading to a lack of awareness and understanding (Willemse et al., 2023). The statistical validation of this relationship highlights the importance of addressing stigma to improve mental health literacy.

The analysis further reveals that individuals with lower perceived stigma tend to demonstrate higher mental health literacy (Carrara et al., 2019; Waqas et al., 2020). This suggests that reducing negative attitudes and misconceptions surrounding mental health can encourage individuals to seek knowledge and support. The findings also show that stigma reduction efforts increase engagement with mental health resources. This reinforces the need for initiatives that challenge harmful stereotypes and promote a more open and supportive perspective on mental health (Schomerus et al., 2019).

The findings on perceived stigma are consistent with established mental health literacy frameworks that recognize stigma as a barrier to knowledge acquisition and service utilization (Flores et al., 2025; Vergara & Taja-on, 2025). Similar to the existing tools, which include attitudes and stigma-related perceptions as core domains, the present results show that perceived stigma emerged as a distinct and statistically supported construct within the measurement model. This suggests that negative perceptions about mental health influence understanding and engagement across different academic stages. While prior research has often examined stigma within more narrowly defined age groups, the current findings demonstrate that its role remains evident within a broader and demographically varied student population.

Self-Efficacy in Managing Mental Health to Mental Health Literacy

Self-efficacy in managing mental health plays a critical role in shaping an individual's ability to cope with psychological challenges and maintain overall well-being (Schönfeld et al., 2019). The findings confirm that self-efficacy has a strong and positive relationship with mental health literacy, indicating that individuals with greater confidence in managing their mental health tend to have a better understanding of mental health concepts. The results demonstrate that individuals with higher self-efficacy are more likely to engage with mental health information, adopt coping strategies, and seek appropriate support when necessary (Morales-Rodríguez & Pérez-Mármol, 2019). The statistical validation of this relationship reinforces the importance of developing self-efficacy to enhance mental health literacy.

The analysis further highlights that individuals with strong self-efficacy are more proactive in addressing mental health concerns and are better equipped to manage stress and emotional challenges (Terp et al., 2019). The findings suggest that self-efficacy fosters resilience, allowing individuals to navigate mental health difficulties more confidently. Additionally, the results indicate that self-efficacy positively influences attitudes toward

mental health education, as individuals with higher confidence levels are more likely to participate in mental health programs and seek professional guidance (Schomerus et al., 2019).

The findings on self-efficacy in managing mental health are consistent with mental health literacy frameworks that recognize confidence in handling psychological challenges as an important component of informed action (Flores et al., 2025; Vergara & Taja-on, 2025). Similar to the tools that include confidence-related or skills-based domains, the present results show that self-efficacy demonstrated strong factor loadings and a significant structural relationship with overall literacy. This indicates that confidence in managing mental health concerns is relevant across different educational levels and developmental stages represented in the dataset. While earlier instruments have often examined self-efficacy within more specific age groups, the current findings extend this evidence by confirming its central role within a broader academic population in a defined regional context.

Cultural Influence on Mental Health to Mental Health Literacy

Cultural influences play a significant role in shaping individuals' perceptions and behaviors related to mental health. The findings confirm that cultural beliefs and traditions have a meaningful impact on mental health literacy, affecting how individuals recognize, interpret, and respond to mental health concerns (Cook et al., 2019; Nguyen, 2020; Ran et al., 2021). The results demonstrate that individuals who grow up in cultures that openly discuss mental health and encourage seeking support tend to have a higher level of mental health literacy. In contrast, those from backgrounds where mental health is considered a taboo topic may struggle with recognizing symptoms and accessing available resources (Misra et al., 2021). The statistical validation of these relationships underscores the need for culturally sensitive approaches to mental health education.

The analysis further highlights that cultural norms influence attitudes toward seeking professional help, with some individuals preferring traditional or community-based interventions over clinical treatments. The findings suggest that in cultures where mental health is viewed as a collective responsibility, individuals may rely more on family or religious support systems rather than professional services (Byrow et al., 2020). This indicates that integrating culturally relevant mental health programs can improve engagement and acceptance of mental health literacy initiatives. Providing information that aligns with cultural values can help individuals feel more comfortable accessing resources and discussing mental health concerns (Jiang et al., 2019).

The findings on cultural influence are consistent with prior mental health literacy frameworks that acknowledge the role of beliefs, norms, and shared values in shaping how individuals understand and respond to mental health concerns (Flores et al., 2025; Vergara & Taja-on, 2025). While several of the tools focus primarily on knowledge, attitudes, and help-seeking intentions, the present results extend these models by empirically supporting cultural influence as a distinct and measurable dimension within the literacy structure. The result suggests that cultural context remains relevant across different educational stages represented in the study.

Mental Health Literacy

The results highlight the multidimensional nature of mental health literacy, demonstrating how various factors shape individuals' understanding and engagement with mental health concepts (Furnham & Swami, 2018). Awareness of mental health resources emerges as a crucial element, as individuals with greater access to information are more likely to recognize symptoms and seek appropriate support (Davis-Bordovsky, 2022). Help-seeking behavior also plays a significant role, with findings showing that individuals more willing to reach out for professional assistance demonstrate a higher level of mental health literacy (Stunden et al., 2020). However, barriers such as stigma continue to hinder progress, as those who perceive mental health issues negatively are less likely to engage with mental health resources (Yu et al., 2021).

Self-efficacy in managing mental health further contributes to an individual's confidence in addressing psychological challenges, with results indicating that those who believe in their ability to manage mental well-being exhibit higher literacy levels. This highlights the importance of fostering resilience and equipping individuals with coping strategies to navigate mental health concerns effectively (Lean et al., 2019). Additionally, cultural influences shape perceptions of mental health, with some individuals relying more on traditional or community-based approaches rather than clinical interventions. Recognizing these cultural differences is essential in designing mental health literacy initiatives that resonate with diverse populations and encourage active participation (Byrow et al., 2020).

The overall findings support the view that mental health literacy is a multidimensional construct composed of interrelated yet distinct domains (Flores et al., 2025; Vergara & Taja-on, 2025). Consistent with established measurement approaches in the field, the results confirm that awareness, help-seeking behavior, perceived stigma, and self-efficacy are central components of literacy. In addition, the validated inclusion of cultural influence broadens the framework by recognizing the role of shared beliefs and norms in shaping understanding and response to mental health concerns. This suggests that the core structure of mental health literacy operates consistently across varied educational levels within the studied context. Compared to existing tools that emphasize knowledge and attitudes as primary elements, the present findings reinforce those foundations while empirically demonstrating the contribution of confidence and cultural context within a diverse student population.

Practical Application

The validated measurement structure provides institutions with a systematic approach to assessing key dimensions of students' mental health literacy, including awareness of resources, help-seeking behavior, perceived stigma, self-efficacy, and cultural influence. Its multidimensional design and demonstrated stability within a large student sample support its use for institutional assessment and program evaluation. By administering the questionnaire, schools can identify strengths and gaps in students' understanding of mental health support systems and determine which areas require focused intervention. Because the instrument captures both knowledge-based and perception-based components, it enables institutions to rely on structured evidence rather than assumptions when planning and refining student welfare initiatives.

The questionnaire may also serve as a monitoring tool within academic settings. It can be administered periodically, such as before and after mental health campaigns or within different points of the academic year, to examine changes in awareness, attitudes, and confidence in managing mental health concerns. Results are most appropriately interpreted by trained personnel in student affairs, guidance, or counseling offices, with emphasis placed on dimension-level patterns rather than individual diagnosis. Findings can inform practical steps such as improving information dissemination, strengthening help-seeking initiatives, addressing stigma through dialogue, and enhancing programs that build student confidence in managing stress. In this way, the instrument supports data-informed institutional decision-making while remaining grounded in measurable student experiences.

LIMITATIONS

Although the instrument demonstrated acceptable structural validity and internal consistency within the full sample, several limitations should be considered. The respondents represented a wide developmental and educational range, from high school to graduate level, yet measurement invariance across age groups and educational stages was not formally tested. As a result, it cannot be fully confirmed that the items function identically or that the constructs hold the same meaning across these subgroups. The use of convenience sampling, while effective in obtaining a large and varied sample, may also introduce selection bias, as

participation depended on voluntary engagement and internet access, potentially limiting the representation of less engaged students. In addition, the validation process focused primarily on structural evidence; concurrent, predictive, and criterion-related validity were not examined. The instrument was not correlated with existing mental health literacy measures, future help-seeking behavior, or independent mental health outcomes. Therefore, while the findings support the internal coherence of the measurement model, further research is needed to strengthen evidence of equivalence across groups and broader forms of validity.

CONCLUSION

The findings demonstrate that mental health literacy is shaped by multiple interrelated dimensions, including awareness of resources, help-seeking behavior, perceived stigma, self-efficacy, and cultural influence. Each dimension showed stable measurement properties and meaningful relationships within the structural model, indicating that literacy extends beyond simple knowledge of mental health concepts. Students who reported greater awareness and stronger help-seeking tendencies also demonstrated higher literacy levels, while stigma functioned as a barrier that weakened engagement with available support. Self-efficacy contributed by strengthening confidence in managing psychological challenges, and cultural influence provided an important context for how mental health is understood and addressed. Together, these results support a structured and multidimensional view of literacy that reflects both individual capacities and social context.

The validated questionnaire offers an empirically grounded framework for assessing these dimensions within academic settings. By confirming the coherence and stability of the measurement structure in a large student sample drawn from Bukidnon, Philippines, the study provides context-specific evidence that these components operate collectively in shaping literacy patterns. At the same time, the sample composition—predominantly undergraduate students within a defined regional setting—suggests that the findings are best interpreted within similar educational and cultural environments. Differences in developmental stage, academic level, and sociocultural background may influence how these dimensions function in other populations. Even so, the results contribute a contextually validated model that integrates knowledge, attitudes, confidence, and cultural factors into a unified assessment framework, offering a structured basis for future research and institutional application.

Acknowledgement

The authors extend their earnest gratitude to the students who participated in the study and the mental health experts who reviewed the content of the article. Their invaluable insights, constructive feedback, and thoughtful guidance have been pivotal in enriching the quality and depth of this research.

Author contributions: FAV: Conceptualization, methodology, investigation, literature review, data curation, visualization, validation, ethical approval, formal analysis, writing (original draft); EPT: Conceptualization, methodology, investigation, literature review, data curation, visualization, validation, ethical approval, formal analysis, writing (original draft). All authors approved the final version of the article.

Funding: The authors received no financial support for the research and/or authorship of this article.

Declaration of interest: The authors declare no competing interests with respect to the research, authorship, and/or publications of this article.

Ethical statement: This study was conducted in accordance with established ethical standards and institutional research protocols of San Isidro College; the study was registered under Research ID No. SIC-113025-SAS1110-35. The authors further ensure that informed consent was obtained from all participants, providing the anonymity and confidentiality of the data collected. Privacy protection measures were implemented at every stage of the study to safeguard participant engagement and ensure the security of all information gathered.

AI statement: The authors acknowledge the use of AI tools (ChatGPT and Grammarly) to enhance the readability and presentation of the study. These tools did not influence the original content, analysis, and/or conclusions. The authors affirm that all analyses and interpretations were conducted with strict adherence to research ethics and academic standards.

Data sharing statement: Due to data-sharing restrictions, individual-level data cannot be publicly posted. However, the datasets used and analysed during the current study are available from the corresponding author on reasonable request.

REFERENCES

Alvarez-Hernandez, L.R., Childs, E.M., Fatehi, M., & Yeo, H. (2024). How perception relates to student utilization of college campus counseling services. *Journal of American College Health*, *72*(8), 2738-2746. https://doi.org/10.1080/07448481.2022.2129973

Bizzotto, N., De Bruijn, G.J., & Schulz, P.J. (2023). Buffering against exposure to mental health misinformation in online communities on Facebook: the interplay of depression literacy and expert moderation. *BMC Public Health*, *23*(1), Article 1577. https://doi.org/10.1186/s12889-023-16404-1

Bryant, A., Cook, A., Egan, H., Wood, J., & Mantzios, M. (2022). Help-seeking behaviours for mental health in higher education. *Journal of Further and Higher Education*, *46*(4), 522-534. https://doi.org/10.1080/0309877X.2021.1985983

Byrow, Y., Pajak, R., Specker, P., & Nickerson, A. (2020). Perceptions of mental health and perceived barriers to mental health help-seeking amongst refugees: A systematic review. *Clinical Psychology Review*, *75*, Article 101812. https://doi.org/10.1016/j.cpr.2019.101812

Carrara, B.S., Ventura, C.A.A., Bobbili, S.J., Jacobina, O.M.P., Khenti, A., & Mendes, I.A.C. (2019). Stigma in health professionals towards people with mental illness: An integrative review. *Archives of Psychiatric Nursing*, *33*(4), 311-318. https://doi.org/10.1016/j.apnu.2019.01.006

Chatmon, B.N. (2020). Males and mental health stigma. *American Journal of Men's Health*, *14*(4), 1557988320949322. https://doi.org/10.1177/1557988320949322

Cheng, H.L., Wang, C., McDermott, R.C., Kridel, M., & Rislin, J.L. (2018). Self-stigma, mental health literacy, and attitudes toward seeking psychological help. *Journal of Counseling & Development*, *96*(1), 64-74. https://doi.org/10.1002/jcad.12178

Cook, B.L., Hou, S.S.Y., Lee-Tauler, S.Y., Progovac, A.M., Samson, F., & Sanchez, M.J. (2019). A review of mental health and mental health care disparities research: 2011-2014. *Medical Care Research and Review*, *76*(6), 683-710. https://doi.org/10.1177/1077558718780592

Cormier, E., Park, H., & Schluck, G. (2020). eMental health literacy and knowledge of common child mental health disorders among parents of preschoolers. *Issues in Mental Health Nursing*, *41*(6), 540-551. https://doi.org/10.1080/01612840.2020.1719247

Davis-Bordovsky, K. (2022). Project mental health awareness: A multimedia, peer-to-peer pilot school curriculum. *Contemporary School Psychology*, *26*(2), 195-199. https://doi.org/10.1007/s40688-020-00296-8

Flores, D. J. A., Dag-um, I. J. P., Sumayang, J. P., & Tadlas, M. S. (2025). Advancing Mental Health Advocacy: A Systematic Review of Student-Led Research Advocating for Well-Being in Higher Education in Bukidnon. *School of Education Report*, *2025*, Article e107. https://doi.org/10.5281/zenodo.15449014

Foulkes, L., & Andrews, J.L. (2023). Are mental health awareness efforts contributing to the rise in reported mental health problems? A call to test the prevalence inflation hypothesis. *New Ideas in Psychology*, *69*, Article 101010. https://doi.org/10.1016/j.newideapsych.2023.101010

Furnham, A., & Swami, V. (2018). Mental health literacy: A review of what it is and why it matters. *International Perspectives in Psychology*, *7*(4), 240-257. https://doi.org/10.1037/ipp0000094

Ganti, V., & Sarma, A. D. (2022). *Data Cleaning*. Springer Nature. https://doi.org/10.1007/978-3-031-01897-8

Guarneri, J.A., Oberleitner, D.E., & Connolly, S. (2019). Perceived stigma and self-stigma in college students: A literature review and implications for practice and research. *Basic and Applied Social Psychology*, *41*(1), 48-62. https://doi.org/10.1080/01973533.2018.1550723

Hadad, S. (2026). Factors influencing student help-seeking behavior during crisis: A mixed-method analysis in higher education. *Studies in Higher Education*, 51(2), 371-389. https://doi.org/10.1080/03075079.2025.2468842

Hughes-Barton, D., Skaczkowski, G., Starick, H., & Gunn, K.M. (2025). Mental health and wellbeing helplines for farmers: A scoping review of usage, acceptability, and effectiveness of those currently in operation around the world. *Journal of Agromedicine*, 30(3), 640-663. https://doi.org/10.1080/1059924X.2024.2418816

Javed, A., Lee, C., Zakaria, H., Buenaventura, R.D., Cetkovich-Bakmas, M., Duailibi, K., ... & Azeem, M.W. (2021). Reducing the stigma of mental health disorders with a focus on low-and middle-income countries. *Asian Journal of Psychiatry*, *58*, Article 102601. https://doi.org/10.1016/j.ajp.2021.102601

Jiang, T., Li, H., & Hou, Y. (2019). Cultural differences in humor perception, usage, and implications. *Frontiers in Psychology*, *10*, Article 123. https://doi.org/10.3389/fpsyg.2019.00123

Kline, R.B. (2023). *Principles and practice of structural equation modeling* (5th Ed.). Guilford Publications.

LaMontagne, A.D., Shann, C., Lolicato, E., Newton, D., Owen, P.J., Tomyn, A.J., & Reavley, N.J. (2023). Mental health-related knowledge, attitudes and behaviours in a cross-sectional sample of Australian university students: A comparison of domestic and international students. *BMC Public Health*, *23*(1), Article 170. https://doi.org/10.1186/s12889-023-15123-x

Lean, M., Fornells-Ambrojo, M., Milton, A., Lloyd-Evans, B., Harrison-Stewart, B., Yesufu-Udechuku, A., ... & Johnson, S. (2019). Self-management interventions for people with severe mental illness: systematic review and meta-analysis. *The British Journal of Psychiatry*, *214*(5), 260-268. https://doi.org/10.1192/bjp.2019.54

Lee, J. E., Goh, M. L., & Yeo, S. F. (2023). Mental health awareness of secondary schools students: Mediating roles of knowledge on mental health, knowledge on professional help, and attitude towards mental health. *Heliyon*, *9*(3). https://doi.org/10.1016/j.heliyon.2023.e14512

Lian, Z., Wallace, B.C., & Fullilove, R.E. (2020). Mental health help-seeking intentions among Chinese international students in the US higher education system: The role of coping self-efficacy, social support, and stigma for seeking psychological help. *Asian American Journal of Psychology*, *11*(3), 147-157. https://psycnet.apa.org/doi/10.1037/aap0000183

Marrero, B. (2019). Increasing mental health awareness and services to meet the needs of online students. *Journal of Online Higher Education*, *3*(3), 20-27.

Misra, S., Jackson, V.W., Chong, J., Choe, K., Tay, C., Wong, J., & Yang, L.H. (2021). Systematic review of cultural aspects of stigma and mental illness among racial and ethnic minority groups in the United States: Implications for interventions. *American Journal of Community Psychology*, *68*(3-4), 486-512. https://doi.org/10.1002/ajcp.12516

Morales-Rodríguez, F.M., & Pérez-Mármol, J.M. (2019). The role of anxiety, coping strategies, and emotional intelligence on general perceived self-efficacy in university students. *Frontiers in Psychology*, *10*, Article 1689. https://doi.org/10.3389/fpsyg.2019.01689

Nguyen, A.W. (2020). Religion and mental health in racial and ethnic minority populations: A review of the literature. *Innovation in Aging*, *4*(5), igaa035. https://doi.org/10.1093/geroni/igaa035

Nobre, J., Oliveira, A. P., Monteiro, F., Sequeira, C., & Ferré-Grau, C. (2021). Promotion of mental health literacy in adolescents: a scoping review. *International Journal of Environmental Research and Public Health*, *18*(18), Article 9500. https://doi.org/10.3390/ijerph18189500

Philpott, L. (2022). Mental health: Making inroads in mental health awareness. *The Australian Journal of Pharmacy*, *103*(1215), 64-66. https://search.informit.org/doi/10.3316/informit.384429795435500

Ran, M.S., Hall, B.J., Su, T.T., Prawira, B., Breth-Petersen, M., Li, X.H., & Zhang, T.M. (2021). Stigma of mental illness and cultural factors in Pacific Rim region: A systematic review. *BMC Psychiatry*, *21*, Article 8. https://doi.org/10.1186/s12888-020-02991-5

Ratnayake, P., & Hyde, C. (2019). Mental health literacy, help-seeking behaviour and wellbeing in young people: Implications for practice. *Educational and Developmental Psychologist*, *36*(1), 16-21. https://doi.org/10.1017/edp.2019.1

Republic Act No. 11036. (2018). *Philippine Mental Health Act*. Republic of the Philippines. https://lawphil.net/statutes/repacts/ra2018/ra_11036_2018.html

Ridwanullahi, A. T., Abubakar, U. S. M. A. N., & Suleiman, G. O. (2025). Impact Of Sample Size, Dimensionality, And Normality Assumptions on Sphericity Tests: A Comparative Analysis of Bartlett's and Mauchly's Methods. *Kogi Journal of Education and Pedagogy*, *4*(1), 131-137.

Schomerus, G., Stolzenburg, S., Freitag, S., Speerforck, S., Janowitz, D., Evans-Lacko, S., ... & Schmidt, S. (2019). Stigma as a barrier to recognizing personal mental illness and seeking help: a prospective study among untreated persons with mental illness. *European Archives of Psychiatry and Clinical Neuroscience*, *269*, 469-479. https://doi.org/10.1007/s00406-018-0896-0

Schönfeld, P., Brailovskaia, J., Zhang, X.C., & Margraf, J. (2019). Self-efficacy as a mechanism linking daily stress to mental health in students: A three-wave cross-lagged study. *Psychological Reports*, *122*(6), 2074-2095. https://doi.org/10.1177/0033294118787496

Seedaket, S., Turnbull, N., Phajan, T., & Wanchai, A. (2020). Improving mental health literacy in adolescents: Systematic review of supporting intervention studies. *Tropical Medicine & International Health*, *25*(9), 1055-1064. https://doi.org/10.1111/tmi.13449

Shahwan, S., Lau, J.H., Goh, C.M.J., Ong, W.J., Tan, G.T.H., Kwok, K.W., ... & Subramaniam, M. (2020). The potential impact of an anti-stigma intervention on mental health help-seeking attitudes among university students. *BMC Psychiatry*, *20*, Article 562. https://doi.org/10.1186/s12888-020-02960-y

Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, *9*(1), 4-11. https://doi.org/10.12691/ajams-9-1-2

Spiker, D.A., & Hammer, J.H. (2019). Mental health literacy as theory: current challenges and future directions. *Journal of Mental Health*, *28*(3), 238-242. https://doi.org/10.1080/09638237.2018.1437613

Stunden, C., Zasada, J., VanHeerwaarden, N., Hollenberg, E., Abi-Jaoudé, A., Chaim, G., ... & Wiljer, D. (2020). Help-seeking behaviors of transition-aged youth for mental health concerns: Qualitative study. *Journal of Medical Internet Research*, *22*(10), Article e18514. https://doi.org/10.2196/18514

Teo, K., Churchill, R., Riadi, I., Kervin, L., Wister, A.V., & Cosco, T.D. (2022). Help-seeking behaviors among older adults: a scoping review. *Journal of Applied Gerontology*, *41*(5), 1500-1510. https://doi.org/10.1177/07334648211067710

Terp, U., Hjärthag, F., & Bisholt, B. (2019). Effects of a cognitive behavioral-based stress management program on stress management competency, self-efficacy and self-esteem experienced by nursing students. *Nurse Educator*, *44*(1), E1-E5. https://doi.org/10.1097/NNE.0000000000000492

Tesfaye, Y., Agenagnew, L., Terefe Tucho, G., Anand, S., Birhanu, Z., Ahmed, G., ... & Yitbarek, K. (2020). Attitude and help-seeking behavior of the community towards mental health problems. *PLoS One*, *15*(11), Article e0242160. https://doi.org/10.1371/journal.pone.0242160

Turuba, R., Toddington, C., Tymoschuk, M., Amarasekera, A., Howard, A.M., Brockmann, V., ... & Barbic, S. (2023). "A peer support worker can really be there supporting the youth throughout the whole process": A qualitative study exploring the role of peer support in providing substance use services to youth. *Harm Reduction Journal*, *20*(1), Article 118. https://doi.org/10.1186/s12954-023-00853-3

Ungar, M., & Theron, L. (2020). Resilience and mental health: How multisystemic processes contribute to positive outcomes. *The Lancet Psychiatry*, *7*(5), 441-448. https://doi.org/10.1016/S2215-0366(19)30434-1

Vergara, F. A., & Taja-on, E. P. (2025). Student voices for student minds: a scoping review of student-led initiatives in mental health advocacy and welfare. *Journal of Mental Health & Well-Being*, *1*(1), 15-26. https://journals.e-palli.com/home/index.php/jmhwb/article/view/5121

Vidourek, R.A., & Burbage, M. (2019). Positive mental health and mental health stigma: A qualitative study assessing student attitudes. *Mental Health & Prevention*, *13*, 1-6. https://doi.org/10.1016/j.mhp.2018.11.006

Yu, B. C.L., Chio, F.H., Mak, W.W., Corrigan, P.W., & Chan, K.K. (2021). Internalization process of stigma of people with mental illness across cultures: A meta-analytic structural equation modeling approach. *Clinical Psychology Review*, *87*, Article 102029. https://doi.org/10.1016/j.cpr.2021.102029

Walsh, D.A.B., & Foster, J.L.H. (2021). A call to action. A critical review of mental health related anti-stigma campaigns. *Frontiers in Public Health*, *8*, Article 569539. https://doi.org/10.3389/fpubh.2020.569539

Waqas, A., Malik, S., Fida, A., Abbas, N., Mian, N., Miryala, S., ... & Naveed, S. (2020). Interventions to reduce stigma related to mental illnesses in educational institutes: A systematic review. *Psychiatric Quarterly*, *91*(3), 887-903. https://doi.org/10.1007/s11126-020-09751-4

Willemse, H., Geenen, R., Egberts, M.R., Engelhard, I.M., & Van Loey, N.E. (2023). Perceived stigmatization and fear of negative evaluation: Two distinct pathways to body image dissatisfaction and self-esteem in burn survivors. *Psychology & Health*, *38*(4), 445-458. https://doi.org/10.1080/08870446.2021.1970160

Zhou, E., Kyeong, Y., Cheung, C.S., & Michalska, K.J. (2022). Shared cultural values influence mental health help-seeking behaviors in Asian and Latinx college students. *Journal of Racial and Ethnic Health Disparities*, *9*(4), 1325-1334. https://doi.org/10.1007/s40615-021-01073-w

APPENDIX. MENTAL HEALTH LITERACY QUESTIONNAIRE

I.	Awareness of Mental Health Resources
1	I am aware of the mental health services available at my school or community.
2	I know where to find professional help if I experience mental health concerns.
3	I am familiar with mental health hotlines and emergency support services.
4	I understand the roles of different mental health professionals (e.g., psychologists, counselors, psychiatrists).
5	I know how to access online resources for mental health support.
6	I have received information about mental health services through school, work, or community programs.
7	I believe that mental health resources are difficult to find and access. *
8	I understand my rights regarding access to mental health care and confidentiality.

* are reversed coded

II.	Help-Seeking Behavior
1	I am willing to talk to a mental health professional if I experience emotional distress.
2	I feel comfortable discussing my mental health concerns with a trusted friend or family member.
3	I would rather keep my mental health struggles to myself than seek help. *
4	I believe that asking for help is a sign of strength rather than weakness.
5	If I felt overwhelmed, I would reach out for support instead of trying to handle it alone.
6	I would encourage a friend to seek professional help if they were struggling.
7	I would seek professional help even if my mental health problem seems minor.

* are reversed coded

III.	Perceived Stigma Regarding Mental Health
1	I feel ashamed to admit if I have mental health challenges. *
2	I believe that seeking help for mental health problems is a sign of weakness. *
3	I worry about being labeled if I openly talk about my mental health challenges.
4	I worry that seeking help for mental health issues may affect my reputation. *
5	I feel that mental health concerns are sometimes viewed as a personal weakness.
6	I believe that mental health is just as important as physical health.
7	I support open conversations about mental health in schools, workplaces, and communities.
8	People who see a counselor or therapist are often judged by others. *
9	I think that people with mental health conditions are treated unfairly in society. *

* are reversed coded

IV.	Self-Efficacy in Managing Mental Health
1	I can recognize when I am feeling mentally overwhelmed and take steps to manage it.
2	I have strategies to cope with stress and emotional difficulties.
3	I believe I can improve my mental health through self-care and healthy habits.
4	I know how to regulate my emotions in challenging situations.
5	I feel powerless in managing my mental health challenges. *
6	I am capable of making decisions that prioritize my mental well-being.
7	I feel confident in my ability to manage negative thoughts and feelings.

* are reversed coded

V.	Cultural Influences on Mental Health
1	My cultural background influences how I view mental health and seeking help.
2	My religious or spiritual beliefs provide me with emotional support during difficult times.
3	I believe that mental health problems should only be dealt with through faith and not professional help. *
4	My family's beliefs about mental health impact my willingness to seek professional help.
5	I am comfortable discussing mental health concerns within my religious or cultural community.
6	My cultural or religious beliefs discourage seeking professional mental health support. *
7	I believe that my faith or cultural values positively impact my mental resilience.
8	I believe that prayer or spiritual practices can contribute to mental well-being.

* are reversed coded

Description and Interpretation

Note: Items with "*" are reverse-coded.

Instructions for Interpretation

This section provides guidance on how the researchers will interpret the results gathered from the self-assessment surveys administered to college students regarding the Mental Health Literacy. The surveys utilize a 7-point Likert scale where higher scores indicate stronger agreement or higher levels of awareness, attitude, experience, or knowledge.

1. Scoring the Responses
    - Each item is rated from 7 (Strongly Agree) to 1 (Strongly Disagree).
    - For each participant, compute the mean score for every dimension and an overall mean score for the entire instrument.
    - For negatively worded (*reverse-coded*) items, apply the reverse-scoring formula:

$$8 - (\text{participant's rating})$$

    This ensures that higher values consistently reflect more positive or higher levels of the construct measured.

2. Interpreting Mean Scores
    - Use the interpretation table provided for each instrument to classify the overall and dimensional mean scores into descriptive categories (e.g., *Very High*, *High*, *Moderate*, *Low*).
    - Interpretations should align with the range of mean scores as follows:
        - 6.20–7.00: Very High
        - 5.40–6.19: High
        - 4.60–5.39: Moderate
        - 3.80–4.59: Low-Moderate
        - 3.00–3.79: Low
        - 2.00–2.99: Very Low
        - 1.00–1.99: None or Negative

3. Dimension-Level Analysis
    - Compare the mean scores per dimension to identify areas of strength and weakness among the respondents.

Awareness of Mental Health Resources

Mean scores in this domain reflect the extent to which students are informed about available mental health services, professional roles, access pathways, and rights related to mental health care. Higher scores indicate greater familiarity with both institutional and community-based mental health resources.

Mean Range	Verbal Interpretation	Description
6.15 – 7.00	Very High Awareness	Indicates a comprehensive understanding of available mental health resources, including professional services, access procedures, and rights related to mental health care.
5.29 – 6.14	High Awareness	Reflects strong familiarity with mental health services and general knowledge of how and where to seek support.

4.43 – 5.28	Moderate Awareness	Suggests adequate awareness of mental health resources, though some gaps in knowledge or access may still be present.
3.57 – 4.42	Low Awareness	Indicates limited knowledge of available mental health services and how to access professional support.
2.71 – 3.56	Very Low Awareness	Reflects minimal awareness of mental health resources and support systems.
1.85 – 2.70	Extremely Low Awareness	Indicates a serious lack of awareness regarding mental health services, rights, and available support.
1.00 – 1.84	Lack of Awareness	Suggests little to no meaningful awareness of mental health resources or access mechanisms.

Help-Seeking Behavior

This construct reflects students' willingness and openness to seeking emotional and psychological support from professionals, family, or peers. Higher mean values indicate stronger readiness to seek help and a more positive orientation toward mental health support.

Mean Range	Verbal Interpretation	Description
6.15 – 7.00	Very High Help-Seeking Orientation	Indicates a strong willingness to seek professional and social support for mental health concerns.
5.29 – 6.14	High Help-Seeking Orientation	Reflects a positive attitude toward seeking help and encouraging others to do the same.
4.43 – 5.28	Moderate Help-Seeking Orientation	Suggests openness to seeking help, though some hesitation or selectivity may exist.
3.57 – 4.42	Low Help-Seeking Orientation	Indicates reluctance or discomfort in seeking mental health support.
2.71 – 3.56	Very Low Help-Seeking Orientation	Reflects strong hesitation or avoidance of seeking mental health assistance.
1.85 – 2.70	Extremely Low Help-Seeking Orientation	Indicates a pronounced tendency to avoid help-seeking behaviors.
1.00 – 1.84	Lack of Help-Seeking Orientation	Suggests complete resistance to seeking mental health support.

Perceived Stigma Regarding Mental Health

Mean scores represent students' perceptions of stigma, shame, judgment, and societal attitudes related to mental health. After reverse coding, higher scores indicate lower perceived stigma and greater acceptance of mental health concerns as legitimate and important.

Mean Range	Verbal Interpretation	Description
6.15 – 7.00	Very Low Perceived Stigma	Indicates strong rejection of stigmatizing beliefs and high acceptance of mental health concerns.
5.29 – 6.14	Low Perceived Stigma	Reflects generally positive attitudes toward mental health and openness to discussion.
4.43 – 5.28	Moderate Perceived Stigma	Suggests mixed views, with some lingering concerns about judgment or labeling.
3.57 – 4.42	High Perceived Stigma	Indicates notable concerns about social judgment related to mental health issues.
2.71 – 3.56	Very High Perceived Stigma	Reflects strong beliefs that mental health concerns are stigmatized or socially risky.
1.85 – 2.70	Extremely High Perceived Stigma	Indicates deeply rooted stigmatizing beliefs toward mental health.
1.00 – 1.84	Severe Perceived Stigma	Suggests pervasive stigma that may significantly hinder openness and help-seeking.

Self-Efficacy in Managing Mental Health

This dimension measures students' confidence in recognizing, managing, and coping with mental health challenges. Higher mean scores indicate stronger perceived capability to regulate emotions, handle stress, and prioritize mental well-being.

Mean Range	Verbal Interpretation	Description
6.15 – 7.00	Very High Self-Efficacy	Indicates strong confidence in recognizing, managing, and regulating mental health challenges.
5.29 – 6.14	High Self-Efficacy	Reflects confidence in coping strategies and emotional regulation.
4.43 – 5.28	Moderate Self-Efficacy	Suggests adequate ability to manage mental health, with room for improvement.
3.57 – 4.42	Low Self-Efficacy	Indicates uncertainty or difficulty in managing mental health concerns independently.
2.71 – 3.56	Very Low Self-Efficacy	Reflects limited confidence in coping with stress and emotional difficulties.
1.85 – 2.70	Extremely Low Self-Efficacy	Indicates a strong sense of helplessness in managing mental health.
1.00 – 1.84	Lack of Self-Efficacy	Suggests complete lack of perceived ability to manage mental health challenges.

Cultural Influences pn Mental Health

Mean values in this construct reflect how cultural, religious, and spiritual beliefs shape students' understanding of mental health and help-seeking behaviors. Higher scores indicate that cultural and spiritual factors are viewed as supportive rather than restrictive to mental health literacy.

Mean Range	Verbal Interpretation	Description
6.15 – 7.00	Very Positive Cultural Influence	Indicates that cultural and religious beliefs strongly support mental well-being and help-seeking.
5.29 – 6.14	Positive Cultural Influence	Reflects cultural values that generally encourage emotional support and resilience.
4.43 – 5.28	Moderate Cultural Influence	Suggests cultural beliefs play a balanced role in shaping mental health perspectives.
3.57 – 4.42	Slightly Restrictive Cultural Influence	Indicates some cultural hesitation toward professional mental health support.
2.71 – 3.56	Restrictive Cultural Influence	Reflects cultural or religious beliefs that may discourage formal mental health care.
1.85 – 2.70	Highly Restrictive Cultural Influence	Indicates strong cultural barriers to mental health awareness and help-seeking.
1.00 – 1.84	Severely Restrictive Cultural Influence	Suggests cultural beliefs significantly limit mental health literacy and support behaviors.

Mental Health Literacy

Mean scores in this overall domain reflect the extent to which students demonstrate knowledge, attitudes, and confidence related to mental health. This includes awareness of available resources, willingness to seek help, reduced stigma perception, confidence in managing mental health concerns, and sensitivity to cultural influences. Higher scores indicate stronger overall mental health literacy across these interconnected dimensions.

Mean Range	Verbal Interpretation	Description
6.15 – 7.00	Very High Mental Health Literacy	Indicates a comprehensive understanding of mental health concepts, strong awareness of available resources, positive

		help-seeking attitudes, low stigma perception, and high confidence in managing mental health concerns.
5.29 – 6.14	High Mental Health Literacy	Indicates strong knowledge of mental health issues and services, generally positive attitudes toward seeking support, and confidence in navigating mental health challenges.
4.43 – 5.28	Moderate Mental Health Literacy	Indicates adequate understanding of mental health concepts and services, though some gaps in knowledge, attitudes, or confidence may still be present.
3.57 – 4.42	Low Mental Health Literacy	Indicates limited understanding of mental health concerns and available resources, with noticeable barriers related to stigma, help-seeking, or self-confidence.
2.71 – 3.56	Very Low Mental Health Literacy	Indicates minimal knowledge of mental health issues and services, weak help-seeking tendencies, and greater influence of stigma or uncertainty in managing mental health.
1.85 – 2.70	Extremely Low Mental Health Literacy	Indicates serious gaps in understanding mental health concepts, very limited awareness of support systems, and low confidence in addressing mental health concerns.
1.00 – 1.84	Lack of Mental Health Literacy	Indicates little to no meaningful understanding of mental health, available resources, help-seeking processes, or self-management strategies.