



## REVIEW ARTICLE

# Conceptual framework of mental health literacy: Results from a scoping review and a Delphi survey

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## Abstract

Mental health literacy (MHL) has been identified as a factor influencing early help-seeking for mental health problems (MHPs) and stigmatizing attitudes. However, the lack of consensus on its definition has led to considerable heterogeneity in measurement and, consequently, methodological challenges in comparing data. In this way, the present study was conducted with the following objectives: in Phase I, mapping the existing literature through a scoping review; in Phase 2, 28 experts in the field of mental health participated to develop a consensus statement on the relevance and importance of the findings from Phase 1. A total of 37 articles were included for review. Notable nuances were identified in the conceptualization of MHL, particularly with regard to the fact that it should not be limited to mental disorders but should also encompass mental health. Furthermore, the sociocultural influence was highlighted as shaping MHL, recognizing it as a modifiable competence that adapts to different contexts and life stages, involving both individual and collective levels. The experts deemed the findings pertinent and relevant with a high degree of consensus, except for factors related to MHL. This framework provides a refined definition of MHL and related factors that should be taken into account to guide nursing and other disciplines' studies and interventions on MHL. The evolution of this concept includes dimensions to be considered in future research, especially when developing new measurement instruments or implementing educational programmes. This knowledge and skills cannot be determined globally without considering the context and development of the individual.

## KEY WORDS

health literacy, help-seeking behaviour, knowledge, mental health, social stigma

## INTRODUCTION

Mental health literacy (MHL), understood as the knowledge that helps recognize, manage, and prevent mental disorders (MD) while reducing stigma, has been identified as one of the determining factors in seeking health-care attention (Crowe et al., 2018).

This term was formally coined for the first time in 1997 as the a set of “Knowledge and beliefs about MD which aid their recognition, management or prevention” (Jorm

et al., 1997). According to this initial definition, MHL would include the ability to recognize specific disorders; knowing how to seek information about mental health (MH); knowledge of risk factors and causes, self-treatments, and available professional help; and attitudes that promote recognition and the search for appropriate help (Jorm et al., 1997).

However, one of the main issues identified in the literature was the lack of consistency among different instruments when measuring all aspects that compose

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the concept of MHL. One methodological bias found was the absence of guidance or input from, for example, healthcare professionals in the construction of these instruments (Wei et al., 2015).

Understanding what MHL is and what factors influence it is of great relevance, especially when considering its relationship with stigmatizing attitudes towards MD (Freñan et al., 2021). These conditions have historically been associated with potentially negative events, including divine punishments and demonic possessions (Rössler, 2016; Thornicroft et al., 2009). A distorted perception that begins at very early ages (Ferrari et al., 2019; Wilson et al., 2000) and has been perpetuated throughout the centuries (Rössler, 2016).

The discrimination faced by individuals with MD leads to the labelling of individuals simply for seeking MH services. The fear of being rejected thus leads to secrecy about their illness (Oexle et al., 2017). The illness is perceived as a personal failure by the affected people themselves, promoting what is known as self-stigma (Crowe et al., 2018). Thus, labelling and negative discriminatory experiences result in social isolation, low self-esteem, and shame (Schnyder et al., 2017). Consequently, it is common for these individuals to behave inappropriately when seeking specialized help (Savage et al., 2016). Both self-stigma related to MD and self-stigma related to seeking help have been shown to have an inverse relationship with MHL (Crowe et al., 2018).

The high prevalence of MD goes hand in hand with the need for new strategies to prevent them and promote MH among the general population (Fusar-Poli et al., 2021). In Spain alone, MD accounted for the highest number of hospital stays in 2021, with a total of 6046258 (16.1%) and an average length of stay of 53.1 days (Instituto Nacional de Estadística, 2021). Despite these figures, there appears to be a critical gap in our understanding of the role played by MHL in both help seeking and the formation of negative ideas surrounding MD and the individuals who experience them in Spain. Most of the studies conducted have focused on evaluating the impact of literacy programmes through anti-stigma interventions on children and adolescents. One of the interventions carried out in our country is the Mental Health Literacy Program (MHL) “EspaiJove.net”, developed in Barcelona for secondary schools. The [EspaiJove.net](http://EspaiJove.net) intervention aims to promote MH, prevent MD, and facilitate help-seeking behaviours among secondary school students in the Spanish context (Castellvi et al., 2019).

In conclusion, the concept of MHL frequently appears in the literature to be discussed heterogeneously about stigma, help-seeking, and other issues related to MD, as well as their potential solutions. The dilemma lies in the diversity of objectives in different studies as well as the multitude of instruments developed for its measurement. These aspects make it difficult to obtain

a comprehensive understanding of the concept and its scope, with consequent implications for designing a valid instrument for other populations or cultural groups. In many countries, studies have focused on adapting existing measures or using the conceptual framework from other countries without discussing the process of translation or cultural adaptation. These issues could have a significant impact on understanding MHL and being able to measure it, as multiple contextual factors come into play, including culture, education, geographical location, and availability of healthcare resources, among others (Wei et al., 2015).

Given the relevance of this construct in the management and care of MD and the lack of instruments to assess it in the Spanish population, it seems pertinent not only to have a preliminary understanding of what MHL exactly entails but also to question the cultural relevance of the construct. This could help lay the foundation for the development of reliable and validated tools not only in the Spanish context but also in other cultural settings.

## Aim

From here arise the following questions: What is MHL exactly? How has this concept evolved since the first definition by Jorm et al. (1997)? What kind of issues does this concept encompass in order to determine whether a person is literate in this sense or not?

In this way, the present study was conducted with the following objectives: in Phase I, to conduct a study with a mapping of the existing literature through a scoping review (Peters et al., 2020); In Phase 2, to develop a consensus statement on the relevance and importance of the findings according to experts in the field of MH.

## METHOD

### Design

A two-phase design was followed.

### Phase 1: Scoping review

The first phase consisted of a scoping review of the literature on MHL. The following central question was posed: What is understood by MHL according to the existing literature, and how has this concept evolved in recent years? The specific questions for conducting the review were as follows: How is MHL defined when measured in a healthy adult population (without MD)? What types of factors have commonly been associated with MHL in the healthy adult population?

The Joanna Briggs Institute (JBI) guidance (Peters et al., 2020) and the PRISMA-ScR (Preferred Reporting



Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews) checklist (Tricco et al., 2018) were followed throughout. The review was conducted between February and May 2022.

#### *Inclusion and exclusion criteria*

Inclusion and exclusion criteria were established based on the review question, selecting studies whose study population consisted of undiagnosed adults (without MD). Manuscripts where the sample consisted of healthcare professionals or students in healthcare professions were excluded, along with children, adolescents, and older adults (over 65 years). Articles that did not have full-text access and those in which the objective or conception of MHL was limited to a specific MD were also excluded.

To be included, documents had to provide information on any issue related to MHL that added to or discussed the classical concept, regardless of the study's objective. Not only peer-reviewed manuscripts or publications but also documents, reports, theses, projects, or other materials included in grey literature, produced at all levels, both governmental and academic, where MHL was discussed and/or the aim was to measure MHL or its impact on other issues, were accepted.

Although scoping reviews are used to determine the characteristics of a bibliographic corpus and identify existing gaps, the quality of the included studies was assessed using the QATSDD tool (Sirriyeh et al., 2012), COSMIN (Mokkink et al., 2010; Terwee et al., 2018), or Prisma checklist (Page et al., 2021), depending on the study type.

#### *Search strategy*

Searches were conducted in databases covering a variety of disciplines, such as PubMed, Web of Science, Scopus, Medline, and grey literature sources, including technical reports, expert consultations, and websites of organizations and institutions. The search was limited to the last 10 years to obtain the most recent evidence. Only documents written in English, Spanish, or Portuguese were included.

For the search strategy, the descriptor used was "Mental Health Literacy".

#### *Study selection*

After removing duplicates, the results were independently reviewed by two researchers. In cases of disagreement, a third researcher was consulted. From each selected document, data regarding the place of publication, study type, objective, study population, instruments used, key findings, and potential factors related to MHL were extracted.

The documents were then coded according to the research questions using keywords by one researcher. This initial coding was reviewed by an independent researcher using a pre-established form. The codes were grouped to organize the results into thematic areas.

## Phase 2: Delphi technique. Panel of experts

A total of 49 MH experts were invited to participate, including 16 psychologists, 22 mental health nurses (MHN), and 11 psychiatrists. Eligibility criteria included working in clinical practice, academia, or both. Participants were recruited through purposive sampling, which entailed the selection of individuals possessing specific expertise in mental health care. Professionals from various disciplines were included in an attempt to enhance the impact and credibility of the results.

The participants were contacted via email and invited to participate through an online questionnaire designed with Google Forms. The questionnaire was pre-tested with three psychologists experienced in clinical practice and research to ensure that the questions were clearly formulated.

In each round, participants were given one week to respond to the questionnaire, with reminder emails sent before and after the specified deadline.

The study was approved by the Research Ethics Committee of the University of Granada with registration number 2732/CEIH/2022.

#### *Round 1*

In the first round, invited experts received information about the study's purpose and gave their consent to participate. After explaining Phase 1, they were invited to answer two open-ended questions. According to their judgement, what does MHL mean in the context of a healthy adult population? And what types of factors did they believe were related to the level of MHL competence possessed by a healthy adult population? Next, the results of Phase 1 were presented in statements, and experts were asked to rate their relevance in conceptualizing MHL, the importance they attributed to them for the MHL of a healthy adult population, and the clarity of the statements. Ratings were given on a 9-point Likert scale, with 1 indicating "none" and 9 indicating the highest possible score. The last part involved a 9-point Likert scale where experts indicated the level of relationship they attributed to each of the factors identified in the scoping review with respect to MHL. They also had the opportunity to add any factors that had not been previously included in the review.

#### *Round 2*

Participants received a report with the results of the first round, informing them of the need for a second round to seek consensus on certain items. They received a version that included new possible factors related to MHL included from the previous round. In this round, they had the opportunity to explain how they believed these factors influenced MHL, as well as how they believed MHL could be applied in clinical practice and research.



### Round 3

In the final round, experts were invited to reevaluate those issues that had not reached consensus in Phase 2, following the same instructions as in previous rounds. Once again, they received feedback on the overall responses, with a report including a statistical description. Items that did not reach consensus after Round 3 were not excluded based on the potential relevance they might have in other contexts or for other professionals. The confidentiality and identity of the participants and their responses were maintained throughout.

After each round, the results were analysed according to RAND Corporation criteria (Fitch et al., 2001). For a term to be included, there must be agreement. This occurs when more than 75% of the respondents (p75) rate relevance, importance, and clarity with values between 7 and 9. If 75% of the respondents rate the information presented as inadequate for any of the aforementioned reasons with values between 1 and 3, it is considered non-adequate. A range between 4 and 6 implies disagreement and, therefore, the need for another round. The interquartile range is also taken into account, which explains consensus by comparing extreme responses. After each round, participants received a report with the results, along with an invitation to the next round.

## RESULTS

### Phase 1: Scoping review

The initial search yielded a total of 6124 articles, and ultimately, 37 publications were included after applying the inclusion and exclusion criteria and completing the full-text reading. Figure 1 presents the flow diagram of the selected reporting items, illustrating the search and selection process of the included documents.

### General characteristics of the studies

The most frequent type of study was a cross-sectional analytical study (40.54%). In addition, descriptive cross-sectional studies (10.81%), clinimetric studies (10.81%), quasi-experimental studies (8.11%), randomized clinical trials (2.70%), qualitative studies (5.40%), and case-control studies (2.70%) were also identified. We also identified 3 cross-cultural studies (8.11%), one of them descriptive, another analytical and the other clinimetric, and 4 reviews (10.81%), of which 2 were systematic, one was systematic with meta-analysis, and the other was a narrative review (see Supporting Information S1).

The evaluation of study quality showed full compliance with COSMIN criteria for the included clinimetric studies. In the case of reviews, only one study did not meet all the checklist criteria. The remaining articles

ranged from a maximum score of 92.86% (Yu et al., 2015) to 52.38% (Vimalanathan & Furnham, 2019).

Regarding the place of publication, out of the 37 included articles, the majority were conducted in China ( $n=7$ , 18.92%), followed by the United States ( $n=6$ , 16.22%), Canada ( $n=4$ , 10.81%), the United Kingdom ( $n=4$ , 10.81%), and Australia ( $n=4$ , 10.81%). Three studies (8.11%) involved participants from two different countries. Figure 2 displays the geographical distribution of the articles.

The majority of studies that measured aspects of MHL included instruments such as self-reported questionnaires with vignettes depicting fictional characters with MH problems (Chambers et al., 2015). Of the 37 included studies, 32.43% used the Mental Health Literacy Scale (MHLS) (O'Connor & Casey, 2015) or an adaptation of it. Additionally, retrospective information system reviews were used (Hurley et al., 2020) as well as semi-structured interviews in qualitative designs (Kusan, 2013).

Regarding the central question of the study, "What is understood by MHL according to the existing literature?" three main themes were identified that encompass the concept: knowledge/skills that enhance understanding, stigmatizing attitudes, and factors that shape the concept itself, such as cultural influences and personal experiences. The conceptual thematic structure is displayed in Figure 3.

### Conceptualization of MHL

In the literature, several authors, in addition to Jorm et al., have defined MHL over the years (e.g., the Canadian Alliance on Mental Illness and Mental Health (CAMIMH), Kutcher, or O'Connor, among others). In this regard, it is observed that out of the 16 (43.24%) studies that explicitly manifest a conceptual framework, 13 (35.14%) adhere to Jorm's framework as a starting point for their study (either exclusively or in combination with another frame of reference) (see Supporting Information S2).

Reviewing each of the included studies, we see that MHL is considered an integral part of Health Literacy (HL) (Hurley et al., 2020; Kutcher, Wei, & Coniglio, 2016; Lee et al., 2019; Schneider et al., 2021). Like HL, MHL is determined by the context (e.g., developed and applied in everyday life situations) and development (e.g., adapted in its application throughout the lifespan) of the individual. This means that all MHL interventions should be developed and applied contextually, implying that while the core components of MHL interventions should be considered in all situations, the way they are developed and applied should be tailored to the context in which they will be implemented and to the individual's characteristics (Kutcher, Wei, Gilberds, et al., 2016).



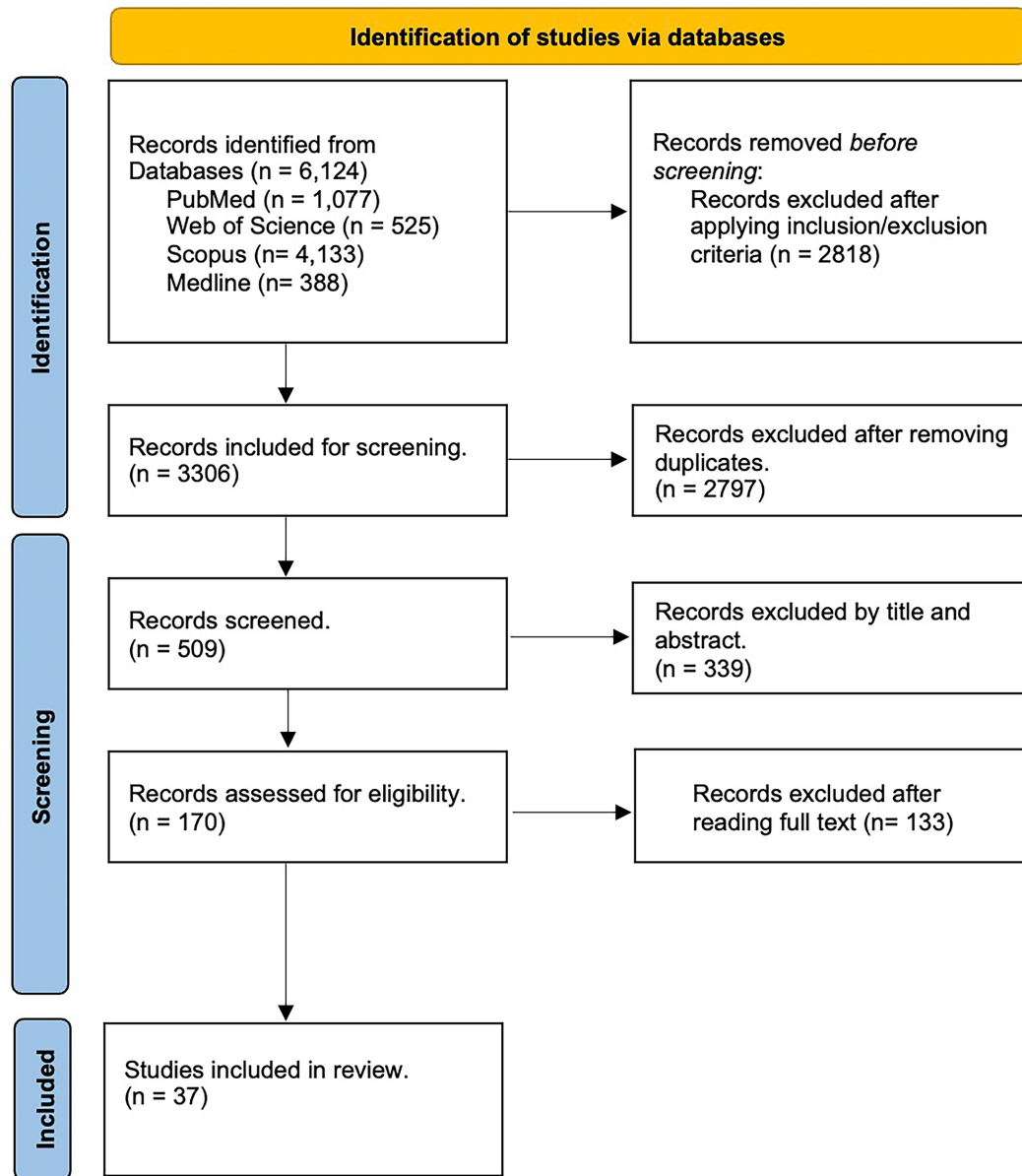


FIGURE 1 Flowchart of screening process.

#### *Knowledge skills that enhance understanding*

One of the most recurring themes in defining the concept of MHL has been focused on knowledge/skills that enhance understanding (Chung & Tse, 2022; Gorczyński et al., 2020; Huang et al., 2019; Kutcher, Wei, & Coniglio, 2016).

#### *Knowledge skills that enhance understanding of MDs*

Thus, on one hand, it is found that for an individual to be considered mentally health literate, they must have a good understanding of MDs (Chung & Tse, 2022; Gorczyński et al., 2020; Kutcher, Wei, & Coniglio, 2016; Kutcher, Wei, Gilberds, et al., 2016). It is important to note that not only should one consider disorders such as depression and anxiety, among others, but also understand those that are not as prevalent (Vimalanathan

& Furnham, 2019). This definition is further elaborated and nuanced in some studies, referring to knowledge of the origins of MDs, (i.e., the causes (Huang et al., 2019)), knowledge of how to prevent MDs (risk factors) (Chung & Tse, 2022), and recognition of MDs (O'Connor & Casey, 2015; White & Casey, 2017), including both the recognition of symptoms (Lui et al., 2016; O'Connor & Casey, 2015; Xu et al., 2018) and the severity (i.e., the person's ability to determine the degree of severity of the disorder (Huang et al., 2019)).

#### *Knowledge skills that enhance understanding of treatments*

On the other hand, in relation to knowledge and skills about MDs, specific reference is made to the recognition of available treatments (Chung & Tse, 2022; Kutcher, Wei,

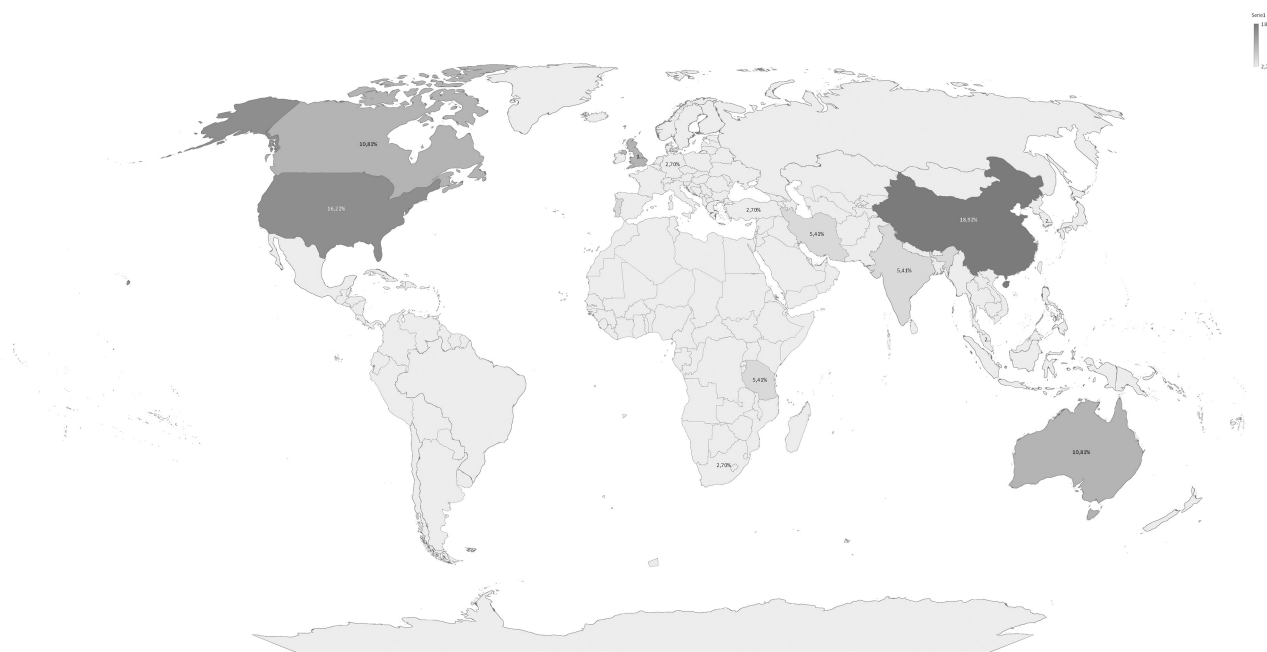


FIGURE 2 Geographical distribution of the studies.

& Coniglio, 2016; Kutcher, Wei, Gilberds, et al., 2016), emphasizing the importance of efficacy in seeking help, understood as the ability to know when and where to seek help (Chung & Tse, 2022; Gorczynski et al., 2020; Kutcher, Wei, & Coniglio, 2016; Kutcher, Wei, Gilberds, et al., 2016; Na et al., 2016; O'Connor & Casey, 2015). This implies that individuals are capable of knowing the available resources (Kim et al., 2017; Madlala et al., 2022) and using them appropriately, as well as having health insurance literacy, which would involve knowing their insurance policy (public or private) and thus the medical services and coverage available to address their MHPs (Tambling et al., 2021).

Another subtheme in this section regarding knowledge of treatments is the understanding of strategies or the ability of a person to help others. It refers to the ability to provide first aid in a situation related to another person's MH disturbance (Chung & Tse, 2022). Similarly, the capacity for self-treatment is identified (Kusan, 2013; Kutcher, Wei, & Coniglio, 2016; Kutcher, Wei, Gilberds, et al., 2016; Lui et al., 2016; O'Connor & Casey, 2015; Yu et al., 2015). In this sense, not only the importance of seeking help is emphasized but also the self-management of MH. This involves developing competencies designed to improve attention and self-management of one's own MH (Kutcher, Wei, & Coniglio, 2016; Kutcher, Wei, Gilberds, et al., 2016; Yu et al., 2015), creating strategies for resilience, salutogenic principles, self-regulation techniques to promote or recover MH, and knowledge about the most suitable tools for each MD (Kusan, 2013). The ability to

self-manage and regulate one's own MH would facilitate the appropriate expression of emotional distress instead of somatizing it (Lui et al., 2016).

#### *Knowledge skills that enhance understanding of MH*

In the selected studies, there is not only mention of knowledge about MDs or treatments but also reference to knowledge about MH (Huang et al., 2019; Kusan, 2013; Yu et al., 2015). Adhering strictly to Jorm's definition poses a problem, as the fact that the concept of MHL is based on the DSM renders it lacking or overlooks MH (Kusan, 2013). Understanding MH means being aware of its biological, psychological, and social aspects in advance (Doğan et al., 2022), allowing individuals to also be conscious of the influence that sociodemographic factors exert on our MH, such as gender (Kusan, 2013; Wong et al., 2017).

Part of this knowledge also involves understanding good MH, that is, promoting MH, which is known as positive mental health (PMH) literacy (Mahmoodi et al., 2022). Individuals would be capable of attaining and maintaining PMH (Kutcher, Wei, & Coniglio, 2016; Kutcher, Wei, Gilberds, et al., 2016) and maintaining a positive attitude towards MH (Lee et al., 2019).

#### *Knowledge skills that enhance access and management of information*

Lastly, there is mention of the knowledge and skills that enable individuals to access, comprehend, and apply information related to MH (Marcus et al., 2012; O'Connor & Casey, 2015). Individuals would have the

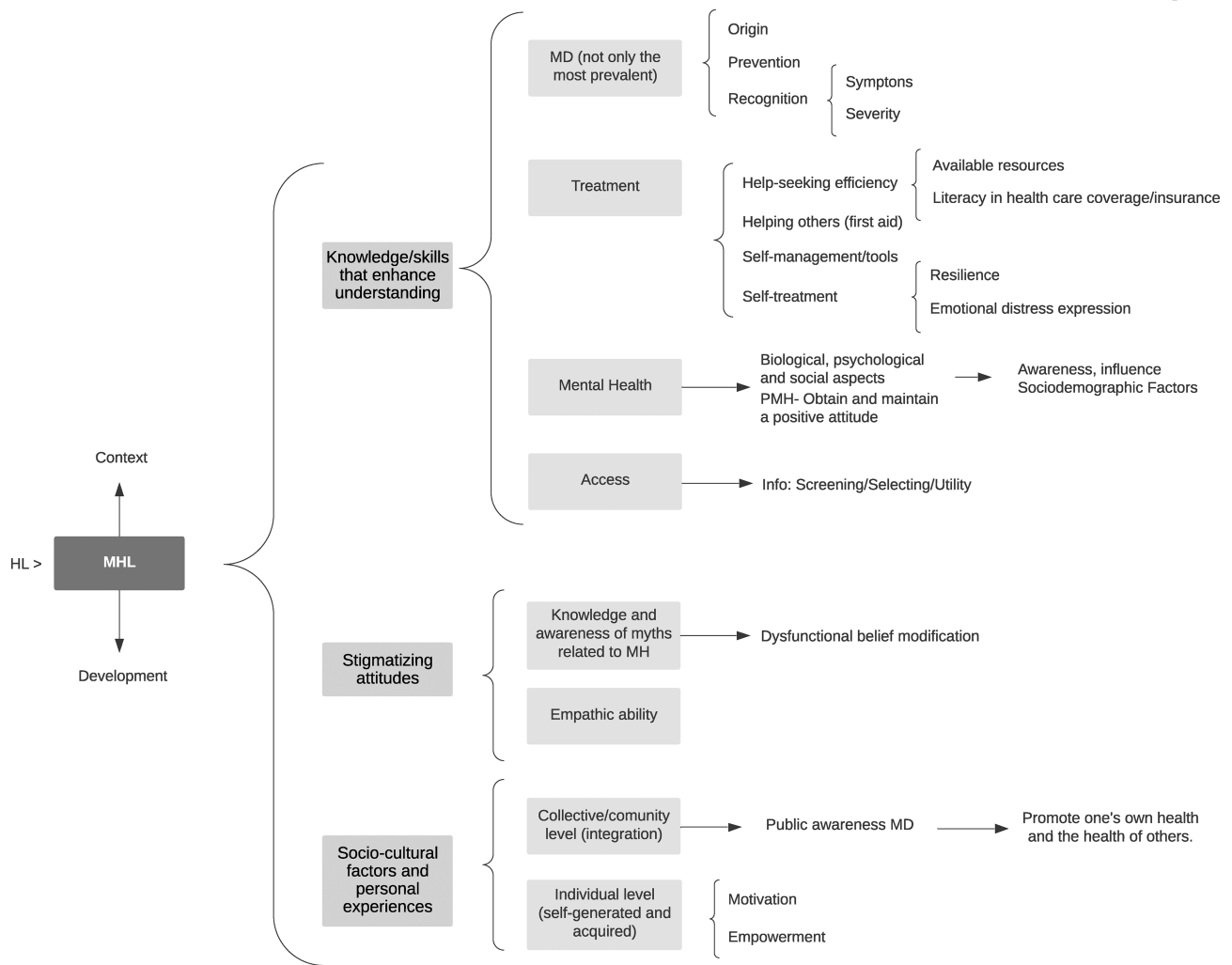


FIGURE 3 Thematic conceptual structure according to the results of the scoping review.

ability to filter such information, meaning they could appropriately select information based on its usefulness and/or relevance while also being aware of its utility for their MH (Kusan, 2013).

*Attitudes and stigmatizing beliefs towards MHP*

Another crucial aspect to consider when defining MHL is the presence of stigmatizing attitudes and beliefs towards MDs, which would be reduced in individuals with better MHL (Chung & Tse, 2022; Kutcher, Wei, & Coniglio, 2016; Loo et al., 2012; White & Casey, 2017).

On one hand, there is knowledge and awareness of the existence of myths held by individuals regarding MDs (Chow et al., 2021). Being aware of these myths allows a person to modify their dysfunctional beliefs about MHPs, treatment, or seeking help (Xu et al., 2018).

On the other hand, literacy also manifests as an individual's empathic capacity, enabling them to express empathy towards a person with a MHP by connecting with their internal thoughts and feelings (Chow et al., 2021; Furnham & Sjokvist, 2017).

*Factors and levels related to MHL*

After reviewing the studies, it was found that MHL is influenced by various factors that should always be taken into account. On one hand, we have sociocultural factors/cultural values, and on the other hand, a series of personal factors influenced primarily by our experiences (Altweck et al., 2015; Heizomi et al., 2020; Holman, 2015; Loo et al., 2012; Mehrotra et al., 2018; Na et al., 2016). Disregarding these factors would result in a simplistic view of MHL (Holman, 2015).

These factors make it necessary to consider MHL at different levels, especially in research or health education. It can be measured at a community or collective level, as well as at an individual level, promoting both individual and collective MH (Mehrotra et al., 2018). The collective level of MHL allows for the integration of this knowledge and skills, creating public awareness about MDs (Kutcher, Wei, Gilberds, et al., 2016). This level is integrated into existing social and organizational structures, such as schools or community organizations (Wang et al., 2013). In terms of the individual level, MHL is considered self-generated knowledge that individuals



negotiate in managing their MH (Kusan, 2013). It is even seen as a motivation for individuals to take action for their own health and well-being (Hurley et al., 2020; Schneider et al., 2021), leading to empowerment (Dias Neto et al., 2021).

## Factors related to the level of competence in MHL

Regarding the question of the study, “What types of factors have commonly been associated with MHL in healthy adult population?”, the following factors were identified in the majority of the reviewed studies: educational level, gender, previous experience with mental illness, age, and socio-economic position in terms of income.

Education (Doğan et al., 2022; Holman, 2015; Huang et al., 2019; Kusan, 2013; Kutcher, Wei, & Coniglio, 2016; Kutcher, Wei, Gilberds, et al., 2016; Wang et al., 2013; White & Casey, 2017; Yu et al., 2015) and age (Huang et al., 2019; Kutcher, Wei, & Coniglio, 2016; Wang et al., 2013; White & Casey, 2017; Yu et al., 2015) have been consistently identified as the factors most related to MHL. For example, one study found that younger respondents and those with higher educational levels had better MHL (Wang et al., 2013).

Gender is another factor that has been identified (Dias et al., 2018; Doğan et al., 2022; Gorczynski et al., 2020; Holman, 2015; Lee et al., 2020). Overall, it was found that women have higher scores in MHL, although there seems to be no consensus due to the inconsistency of the findings.

Previous experience with MDs, either personal experience or that of a family member, was another identified factor. The study by O'Connor and Casey (2015) found significant differences in MH knowledge based on the personal or family history of MDs.

Finally, there is the socio-economic factor (Mahmoodi et al., 2022; Tambling et al., 2021; Yu et al., 2015). Lower income is correlated with lower levels of MHL (Mahmoodi et al., 2022).

## Phase 2: Delphi technique. Panel of experts

Forty-nine MH experts were invited to participate, of which 28 responded to the invitation in the first phase. Among the respondents, 21 were women (75%). The average age of the participants was 41.93 years ( $\pm 13.25$ ). Thirteen were MHNs, eleven were psychologists, and four were psychiatrists. Sixteen participants were engaged in clinical practice; six had an academic profile; and six combined teaching, research, and clinical practice. Subsequent rounds had 25 and 21 participants, respectively.

## The meaning of MHL

### Expert opinions

In Round 1, participants were invited to respond to two open-ended questions. The first question referred to the concept of MHL in the healthy adult population. The participants' responses showed a clear identification of MHL with adequate knowledge (32.14%), not only about MD (53.57%) but also about MH (57.14%). Additionally, knowledge about prevention (14.29%), treatment (10.71%), and symptom recognition/disorders (32.14%) was identified. These knowledge components would promote self-care (28.57%), early help-seeking (28.57%), and enable individuals to provide appropriate support to someone with a MD (14.29%) (See Figure 4).

Some experts also mentioned attitudes and beliefs towards MH, MD, and individuals experiencing them (25%), considering that adequate knowledge would help reduce stigma (42.86%).

Regarding factors related to MHL, the main ones identified were access to information (53.57%) and having received specific training on MH and illness (regardless of profession) (53.57%). Other important factors included profession (28.57%), access to health promotion spaces (25%), age (25%), place of residence (25%), and beliefs about mental illness (25%). Factors such as personal experience, personal and professional interests, and the influence of public opinion or the media were also identified, among others.

In Round 2, they were also asked to give their opinion on the potential clinical and research applications of MHL ( $n = 25$ ).

In the clinical context, they mainly referred to conducting specific training or psychoeducation for the general population (60%) in order to reduce stigma (48%), prevent the onset of MDs (44%), and promote early help-seeking (32%). This could be achieved through advertising campaigns (24%) or educational talks (36). They also emphasized its importance for individualized care (28%). Its clinical application would not be limited to healthcare institutions but also extend to social spaces and the educational context.

Lastly, its application in the research field could be used to carry out quality studies (64%) that could help in the prevention and reduction of MHPs (52%), the identification of factors related to MHL (40%), and the development of protocols (20%) and educational options (24%).

## Expert consensus on the results of the scoping review

### Conceptualization of MHL

Regarding the results of the scoping review, three rounds were conducted to seek consensus from the panel of experts.





**TABLE 1** Delphi survey results ( $n=28$ ).

Theme	Subtheme	Relevance		Importance		Clarity	
		Mean	IQR of 4	Mean	IQR of 4	Mean	IQR of 4
General issues	Integral part of HL	9	1	9	1	8	2
	Determined by social context and individual development	9	1	9	1	9	1
Knowledge/skills	Understanding about mental disorders	9	1	9	1	9	1.25
	Understanding about treatments	9	0.25	9	0	9	1
	Understanding about mental health	9	1	9	1	9	1
	Access and management of information	9	1	9	1	9	1
Stigmatizing attitudes	Attitudes and beliefs	9	0	9	0	9	0
Personal experiences	Sociocultural factors/cultural values	9	1	9	0	9	1
	Level (collective/individual)	9	1	9	0.25	9	0.25

**TABLE 2** Delphi survey results of factors related to MHL.

Factor	Round 1, $n=28$		Round 2, $n=25$		Round 3, $n=21$	
	Mean	IQR of 4	Mean	IQR of 4	Mean	IQR of 4
Age	7	2	7	2		
Sex	5.5	4	5	5	6	4
Educational level	8	2	7	2		
Personal experience	9	1				
Family experience	8.5	1				
Income	6.5	2				
Religiosity			5	4	5	4
Media influence			8	1		
Place of residence			6	2	7	2
Profession			7	1		
Access to health Promotion spaces interests			8	2		
Public opinion			8	1		
Cognitive Capacity/development			7	2		
Access to understandable information			8	2		

the scoping review, identified 37 studies that were thematically coded according to the components of MHL identifying the factors related to this competence among healthy adults. Phase II, the Delphi panel, included a multidisciplinary group of MH experts to obtain a representation of the conceptualization of MHL according to their criteria. These experts, in addition to offering their own perspective, determined the relevance, importance, and clarity of each issue identified in the first phase. They also provided other potential factors that had not been identified in the literature, as well as possible fields of application in both clinical and research settings.

Most experts identified MHL with the knowledge possessed by individuals. Reviewing the studies included in the scoping review, we see that in most articles, the

concept of MHL is defined according to the conception of Jorm et al. (1997) as “knowledge and beliefs about MD that aid in their recognition, management, or prevention”. This conception is based on the idea that the concept consists of 7 attributes summarized in 3 blocks: recognition of specific MD, knowledge (for seeking information, understanding risk factors, causes of MD, and self-treatments, as well as available professional help), and attitudes as something different that helps recognize disorders and seek help (Jorm, 2000; Jorm et al., 1997). Our results provide a broader and more detailed conceptualization. For this reason, analysing this concept reveals different nuances that need to be taken into account in future research, especially when developing new measurement tools or implementing educational



programmes. This type of definition primarily emphasizes knowledge and skills in a global manner, without considering the context or development of each individual (Kutcher, Wei, & Coniglio, 2016) and focusing on aspects of illness (Chung & Tse, 2022; Gorczynski et al., 2020; Huang et al., 2019; Kutcher, Wei, & Coniglio, 2016; Kutcher, Wei, Gilberds, et al., 2016). As we can see, the surveyed experts included MH-related knowledge as an inherent and principal part of this knowledge corpus.

Continuing with this scenario, as already indicated by Kutcher, Wei, and Coniglio (2016) "It may not be reasonable to argue that MHL interventions are a one-size-fits-all shoe". Regarding this, interventions in health can be used as an example. For instance, MHL interventions for teachers cannot be the same as MHL interventions for police officers, although they should reflect the same basic principles of MHL (knowledge, attitudes or stigma, and effectiveness in seeking help). Thus, the conceptualization of MHL cannot be separated from the individual's context, offering various scenarios to implement the necessary actions to promote proper literacy. This individualization has already been identified as crucial in providing care and preventing the onset of MHPs, especially in at-risk groups (Fusar-Poli et al., 2021). The experts identified possible contexts that included not only healthcare institutions but also educational settings and social spaces.

Another reason to consider individualizing those issues related to MHL is the influence of sociocultural factors. Sociocultural influence mediates how literacy is presented as a modifiable competence that allows adaptation to different contexts and life stages, encompassing both individual and collective spheres (Kutcher, Wei, & Coniglio, 2016). When referring to the concept proposed by Jorm et al. (1997), we found a very psychiatric perspective, leaving behind the cultural view of MDs (Holman, 2015). Culture can serve as the basis for the presentation of symptom clusters that are specific to certain societies or culturally bound syndromes, and it can influence the meanings individuals attribute to their illness as well as the associated stigma (Heizomi et al., 2020). This can be observed in how the same instrument, such as the MHLS, when validated in different populations, may undergo modifications in its structure, including a different number of items and varying reliability (Ghaedamini et al., 2022; Nejatian et al., 2021). For example, the Arabic version likely focuses more on describing the concept of mental illness than MH (Alshehri et al., 2021). Despite the impact of MH, only three out of the 37 studies included in our review explicitly considered this type of knowledge (Altweck et al., 2015; Mehrotra et al., 2018; Wong et al., 2017).

Among the factors related to MHL that were identified, age is also necessary to consider. A previous review found that the most frequently assessed domains in MHL studies focused on adolescents were mental illness stigma and help-seeking beliefs. However, the

frequency with which these issues were evaluated in the reviewed studies depended, among other things, on the conceptualization of MHL (Mansfield et al., 2020). The authors also highlight the dominance of studies focused on knowledge and help-seeking for MD, while studies focusing on MH promotion are scarce but necessary (Mansfield et al., 2020).

This confusion regarding what MHL encompasses may also be responsible, in our case, for the variety of instruments used in the reviewed studies, as well as the heterogeneity of the factors considered and therefore the results or findings. As has been observed, most of the included studies used the MHLS (or a translated and adapted version) to determine participants' literacy. This questionnaire is based primarily on Jorm's definition; thus, it includes recognition of major diagnoses (according to the DSM-V) but not other disorders, and it does not encompass issues related to stigma (some issues can be indirectly deduced, for example, the origin of disorders). This scale evaluates access to information but does not consider literacy in health care coverage/insurance, meaning a person might know what a psychologist does but not how to access psychological help. Nor does it assess an individual's ability to provide first aid to someone experiencing a MHP, nor other motivation-related matters, for example, which have been established as significant in individual MHL. For this reason, future studies should consider these issues to develop an instrument that addresses the remaining potential dimensions.

Once again, we see the importance of considering the cultural context, as numerous studies have shown a gender effect, but the experts who participated in the Delphi survey for this study did not reach consensus on its importance or impact on MHL in a healthy adult population. It should be noted that only one round of the Delphi phase was necessary to reach a consensus among all the experts on the conceptualization of the MHL. However, this was not the case for the factors related to it, indicating once again the importance of considering the individual's sociocultural context to properly assess MHL. Previous studies that focused on cross-cultural comparisons performed such comparisons within or between countries, identifying factors like those mentioned here (age, income, area of residence, etc.) with higher MHL in urban areas and more developed countries. However, despite the interest of these studies, difficulties arise when comparing MHL due to differences in how MDs are defined, understood, and treated (Furnham & Swami, 2018). For example, in countries like Malaysia, supernatural and religious explanations are commonly predominant in the aetiology of MHPs (Munawar et al., 2022). These cultural differences have implications for MH practice, affecting treatment-seeking patterns, therapeutic relationships, and discriminatory attitudes (Gopalkrishnan, 2018). In an increasingly globalized world where MH professionals work with clients who



often come from different cultures, we cannot overlook these aspects.

As can be observed, the results show that stigma is part of. This relationship had already been highlighted previously (Kutcher, Wei, & Coniglio, 2016), underscoring its undeniable importance following the emergence of new theories about stigma, despite historically being separated from MHL. However, more recent studies continue to use instruments that do not take this issue into account, measuring stigma towards MDs as a separate matter. The fact that a component of stigma consists of stereotypes, in the form of beliefs or cognitive schemas that the population holds about the characteristics of this group (Fox et al., 2018), justifies a direct connection between MHL and beliefs about MDs and/or MH.

Regarding the potential applications of MHL, the consulted experts considered a wide range of fields in both clinical and research settings. These potential options largely align with the objectives of the studies included in the scoping review, which explore MHL in diverse populations and the impact of educational interventions, as well as the exploration of MHL and various factors. However, studies conducted in the Spanish context are scarce, and in the case of Spanish-speaking populations, they have primarily been conducted in Latin American contexts, with lower levels of MHL observed among participants evaluated in Spanish (Paasche-Orlow et al., 2005). Future studies should take these deficiencies into account and proceed with the validation of instruments, considering a conceptual framework of reference like the one presented here.

From an educational perspective, it is imperative that all educational institutions integrate subjects into their curricula aimed at cultivating competencies, which should encompass skills related to emotional intelligence (both intrapersonal and interpersonal), such as assertiveness, conflict resolution, and emotional management. Moreover, comprehensive programmes should be developed to promote healthy lifestyle habits. These initiatives should not only involve early detection and seeking assistance for MHPs but also promote other practices like regular physical exercise, quality sleep, and the prevention of substance abuse. These habits collectively exert a profound impact on mental well-being. The school nurse plays a crucial role in implementing these actions, which should be coordinated by healthcare centres to ensure that the entire population has equal opportunities to receive such health promotion programmes.

## Limitations

This review presents limitations. Firstly, our search was limited to studies published in the last 10 years and written in English, Spanish, or Portuguese. By applying

these criteria, we may have overlooked some relevant literature that includes other cultural and sociocultural factors in countries where a different language is spoken than those included here. In addition, the Delphi survey, although it included experts from various disciplines, only included professionals of Spanish origin. In the future, it will be necessary to expand the inclusion criteria for publications and extend the scope of the e-Delphi survey. The expertise of professionals from diverse disciplines and cultural backgrounds should be sought to develop a thorough analysis of the conceptual framework of MHL and improve comparability between countries. Furthermore, some of the factors included in the Delphi survey may be important only for specific groups of experts (e.g., psychologists), which could explain why consensus was not reached on some of these factors. These factors that did not achieve consensus may provide valuable information for further research.

Secondly, studies conducted with children, adolescents, and other specific groups were excluded. Although we were interested in understanding the characteristics of a mentally healthy person with a good level of MHL, excluding these studies, as well as those focusing on individuals with MD, may have overlooked other important ideas to consider in building a broader definition of the concept. However, to stay focused on the study's purpose, we must indeed take into account certain factors, as well as the individual's context and development, as highlighted in this work (Kutcher, Wei, & Coniglio, 2016). We have already seen, for example, that age can modify the way the concept of MHL is shaped (Mansfield et al., 2020). It could be interesting to consider these factors when conceptualizing MHL.

Another limitation could be the methodological quality of the included studies. Although it was not the objective of this work, and we aimed to provide the broadest possible overview of the evolution of the concept, it is important to consider aspects that are based on strong scientific evidence.

Despite these limitations, our results provide a solid foundation for conceptualizing MHL, which would have important practical implications. As suggested by the participants in the Delphi survey, MHL can be applied in various contexts within clinical and research settings, but having a conceptual framework of reference is essential to do so appropriately.

## CONCLUSION

This scoping review and Delphi consensus summarize the evolution of the concept of MHL in recent years according to available literature and identify factors related to it, providing consensus on its relevance and importance in the Spanish context.





The results of this review allow us to identify what MHL entails according to the existing literature over the past decade. Most studies consider knowledge/skills that improve understanding, stigmatizing attitudes, and factors that modulate MHL, such as cultural influences and personal experiences.

The variety of nuances and approaches to the concept highlights the problem of the lack of consensus that still exists when defining what we understand by MHL. It is essential to consider that MHL should not be limited to MDs but also encompass MH. Moreover, knowledge and skills should not be viewed in a global sense but should take into account each individual's context when determining their MHL.

### Relevance for clinical practice and research

MHL is related to different attitudes that have an impact on population health, help-seeking, and attitudes towards MDs and people who experience them. Given the high frequency with which MDs occur in the population and the problems of adherence to treatment and rejection or stigmatizing attitudes, the need for a correct understanding of the concept of MHL is unquestionable. Their understanding can facilitate the performance of nurses, whose role as health educators is of particular relevance in the promotion of MHL. Knowledge of MHL can promote the correct adaptation of health promotion programmes and patient guidance in the health care system, with better outcomes.

The results of this research provide a more clarifying view of what MHL is and what factors are related to it, as well as future research priorities and practical applications that may be of interest to researchers, health professionals, educators, and policy makers interested in promoting MHL and well-being.

Policy makers should consider funding and promoting MHL programmes for the general population, with a particular focus on early ages and teacher training. Additionally, they should ensure support for healthcare professionals' training and funding for MHL research that can inform more effective and patient-centred MH policies. Promoting campaigns and policies to reduce stigma associated with MHPs and improving access to MH services can enhance help-seeking.

### AUTHOR CONTRIBUTIONS

Celia Martí-García conceived the idea for this review and supervised all the phases of the study. All authors provided input into the process of the scoping review, collected and analysed data from the Delphi Survey, and have read, given feedback, and agreed on this manuscript. All authors meet authorship criteria according to the latest guidelines of the International Committee of Medical Journal Editors.

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### CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

### DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

### ETHICS STATEMENT

The study was approved by the Research Ethics Committee of the University of Granada with registration number 2732/CEIH/2022.

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### REFERENCES

- Alshehri, E., Alosaimi, D., Rufaidi, E., Alsomali, N. & Tumala, R. (2021) Mental health literacy scale Arabic version: a validation study among Saudi university students. *Frontiers in Psychiatry*, 12, 741146. Available from: <https://doi.org/10.3389/fpsy.2021.741146>
- Altweck, L., Marshall, T.C., Ferenczi, N. & Lefringhausen, K. (2015) Mental health literacy: a cross-cultural approach to knowledge and beliefs about depression, schizophrenia and generalized anxiety disorder. *Frontiers in Psychiatry*, 6, 1272. Available from: <https://doi.org/10.3389/fpsy.2015.01272>
- Castellvi, P., Casañas, R., Arfuch, V.-M., Gil Moreno, J.J., Torres Torres, M., García-Forero, C. et al. (2019) Development and validation of the EspaiJove.net mental health literacy (EMHL) test for Spanish adolescents. *International Journal of Environmental Research and Public Health*, 17(1), 72. Available from: <https://doi.org/10.3390/ijerph17010072>
- Chambers, D., Murphy, F. & Keeley, H.S. (2015) All of us? An exploration of the concept of mental health literacy based on young people's responses to fictional mental health vignettes. *Irish Journal of Psychological Medicine*, 32(1), 129–136. Available from: <https://doi.org/10.1017/ipm.2014.82>
- Chow, G.M., Bird, M.D., Gabana, N.T., Cooper, B.T. & Becker, M.A.S. (2021) A program to reduce stigma toward mental illness and promote mental health literacy and help-seeking in national collegiate athletic association division I student-athletes. *Journal of Clinical Sport Psychology*, 15(3), 185–205. Available from: <https://doi.org/10.1123/jcsp.2019-0104>
- Chung, E.Y. & Tse, T.T. (2022) Effect of human library intervention on mental health literacy: a multigroup pretest–posttest study. *BMC Psychiatry*, 22(1), 73. Available from: <https://doi.org/10.1186/s12888-022-03725-5>



- Crowe, A., Mullen, P.R. & Littlewood, K. (2018) Self-stigma, mental health literacy, and health outcomes in integrated care. *Journal of Counseling & Development*, 96(3), 267–277. Available from: <https://doi.org/10.1002/jcad.12201>
- Dias Neto, D., Rocha, I., Figueiras, M.J. & Da Silva, A.N. (2021) Measuring mental health literacy: adaptation and validation of the Portuguese version of the mental health literacy scale (MHLS). *European Journal of Mental Health*, 16(1), 64–77. Available from: <https://doi.org/10.5708/EJMH.16.2021.1.5>
- Dias, P., Campos, L., Almeida, H. & Palha, F. (2018) Mental health literacy in young adults: adaptation and psychometric properties of the mental health literacy questionnaire. *International Journal of Environmental Research and Public Health*, 15(7), 1318. Available from: <https://doi.org/10.3390/ijerph15071318>
- Doğan, R., Mercan, N. & Coşkun, S. (2022) Investigation of the relationship between mental health literacy of adults and attitude towards seeking psychological help and stigma by the immediate environment. *Perspectives in Psychiatric Care*, 58(4), 1865–1872. Available from: <https://doi.org/10.1111/ppc.13000>
- Ferrari, M., McIlwaine, S.V., Jordan, G., Shah, J.L., Lal, S. & Iyer, S.N. (2019) Gaming with stigma: analysis of messages about mental illnesses in video games. *JMIR Mental Health*, 6(5), e12418. Available from: <https://doi.org/10.2196/12418>
- Fitch, K., Bernstein, S.J., Aguilar, M.D., Burnand, B., LaCalle, J.R., Lázaro, P. et al. (2001) *The RAND/UCLA appropriateness method User's manual*. Santa Mónica, CA: RAND Corp.
- Fox, A.B., Earnshaw, V.A., Taverna, E.C. & Vogt, D. (2018) Conceptualizing and measuring mental illness stigma: the mental illness stigma framework and critical review of measures. *Stigma and Health*, 3(4), 348–376. Available from: <https://doi.org/10.1037/sah0000104>
- Fréjtan, A.M., Graf, P., Kirchhoff, S., Glinphratum, G., Bollweg, T.M., Sauzet, O. et al. (2021) The long-term effectiveness of interventions addressing mental health literacy and stigma of mental illness in children and adolescents: systematic review and meta-analysis. *International Journal of Public Health*, 66, 1604072. Available from: <https://doi.org/10.3389/ijph.2021.1604072>
- Furnham, A. & Sjøkvist, P. (2017) Empathy and mental health literacy. *Health Literacy Research and Practice*, 1(2), e31–e40. Available from: <https://doi.org/10.3928/24748307-20170328-01>
- Furnham, A. & Swami, V. (2018) Mental health literacy: a review of what it is and why it matters. *International Perspectives in Psychology: Research, Practice, Consultation*, 7(4), 240–257. Available from: <https://doi.org/10.1037/ipp0000094>
- Fusar-Poli, P., Correll, C.U., Arango, C., Berk, M., Patel, V. & Ioannidis, J.P.A. (2021) Preventive psychiatry: a blueprint for improving the mental health of young people. *World Psychiatry*, 20(2), 200–221. Available from: <https://doi.org/10.1002/wps.20869>
- Ghaedamini, G., Sajjadi, H., Forouzan, A.S., Ahmadi, S., Ghafari, M. & Vameghi, M. (2022) Validation of the Persian version of the mental health literacy scale in Iran. *Asia-Pacific Psychiatry*, 14(1), e12447. Available from: <https://doi.org/10.1111/appy.12447>
- Gopalkrishnan, N. (2018) Cultural diversity and mental health: considerations for policy and practice. *Frontiers in Public Health*, 6, 179. Available from: <https://doi.org/10.3389/fpubh.2018.00179>
- Gorczyński, P., Sims-Schouten, W. & Wilson, C. (2020) Evaluating mental health literacy and help-seeking behaviours in UK university students: a country wide study. *Journal of Public Mental Health*, 19(4), 311–319. Available from: <https://doi.org/10.1108/JPMH-10-2019-0086>
- Heizomi, H., Kouzekanani, K., Jafarabadi, M.A. & Allahverdipour, H. (2020) Psychometric properties of the Persian version of mental health literacy scale. *International Journal of Women's Health*, 12, 513–520. Available from: <https://doi.org/10.2147/IJWH.S252348>
- Holman, D. (2015) Exploring the relationship between social class, mental illness stigma and mental health literacy using British national survey data. *Health (United Kingdom)*, 19(4), 413–429. Available from: <https://doi.org/10.1177/1363459314554316>
- Huang, D., Yang, L.H. & Pescosolido, B.A. (2019) Understanding the public's profile of mental health literacy in China: a nationwide study. *BMC Psychiatry*, 19(1), 20. Available from: <https://doi.org/10.1186/s12888-018-1980-8>
- Hurley, D., Swann, C., Allen, M.S., Ferguson, H.L. & Vella, S.A. (2020) A systematic review of parent and caregiver mental health literacy. *Community Mental Health Journal*, 56(1), 2–21. Available from: <https://doi.org/10.1007/s10597-019-00454-0>
- Instituto Nacional de Estadística. (2021) Hospital Morbidity Survey. Year 2021, INE. Available at: [https://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica\\_C&cid=1254736176778&menu=ultiDatos&idp=1254735573175](https://www.ine.es/dyngs/INEbase/en/operacion.htm?c=Estadistica_C&cid=1254736176778&menu=ultiDatos&idp=1254735573175) (Accessed: 21 June 2023).
- Jorm, A.F. (2000) Mental health literacy: public knowledge and beliefs about mental disorders. *British Journal of Psychiatry*, 177(5), 396–401. Available from: <https://doi.org/10.1192/bjp.177.5.396>
- Jorm, A.F., Korten, A.E., Jacomb, P.A., Christensen, H., Rodgers, B. & Pollitt, P. (1997) “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*, 166(4), 182–186. Available from: <https://doi.org/10.5694/j.1326-5377.1997.tb140071.x>
- Kim, Y.S., Rhee, T.G., Lee, H.Y., Park, B.H. & Sharratt, M.L. (2017) Mental health literacy as a mediator in use of mental health services among older Korean adults. *International Psychogeriatrics*, 29(2), 269–279. Available from: <https://doi.org/10.1017/S1041610216001721>
- Kusan, S. (2013) Dialectics of mind, body, and place: groundwork for a theory of mental health literacy. *SAGE Open*, 3(4), 215824401351213. Available from: <https://doi.org/10.1177/2158244013512131>
- Kutcher, S., Wei, Y. & Coniglio, C. (2016) ‘Mental health literacy: past, present, and future’, *the Canadian Journal of Psychiatry*, 61(3), 154–158. Available from: <https://doi.org/10.1177/0706743715616609>
- Kutcher, S., Wei, Y., Gilberds, H., Ubuguyu, O., Njau, T., Brown, A. et al. (2016) A school mental health literacy curriculum resource training approach: effects on Tanzanian teachers' mental health knowledge, stigma and help-seeking efficacy. *International Journal of Mental Health Systems*, 10(1), 50. Available from: <https://doi.org/10.1186/s13033-016-0082-6>
- Lee, H.Y., Hwang, J., Ball, J.G., Lee, J. & Albright, D.L. (2019) Is health literacy associated with mental health literacy? Findings from mental health literacy scale. *Perspectives in Psychiatric Care*, 56(2), 393–400. Available from: <https://doi.org/10.1111/ppc.12447>
- Lee, H.Y., Hwang, J., Ball, J.G., Lee, J., Yu, Y. & Albright, D.L. (2020) Mental health literacy affects mental health attitude: is there a gender difference? *American Journal of Health Behavior*, 44(3), 282–291. Available from: <https://doi.org/10.5993/AJHB.44.3.1>
- Loo, P.-W., Wong, S. & Furnham, A. (2012) Mental health literacy: a cross-cultural study from Britain, Hong Kong and Malaysia: mental health literacy across cultures. *Asia-Pacific Psychiatry*, 4(2), 113–125. Available from: <https://doi.org/10.1111/j.1758-5872.2012.00198.x>
- Lui, C., Wong, C. & Furnham, A. (2016) Mental health literacy in Hong Kong. *International Journal of Social Psychiatry*, 62(6), 505–511. Available from: <https://doi.org/10.1177/0020764016651291>
- Madlala, D., Joubert, P.M. & Masenge, A. (2022) Community mental health literacy in Tshwane region I: a quantitative study. *South African Journal of Psychiatry*, 28, 1–8. Available from: <https://doi.org/10.4102/sajpsy.2810.1661>
- Mahmoodi, S.M.H., Ahmadzad-Asl, M., Eslami, M., Abdi, M., Hosseini Kahnamouy, Y. & Rasoulilian, M. (2022) Mental health literacy and mental health information-seeking behavior in Iranian university students. *Frontiers in Psychiatry*, 13, 893534. Available from: <https://doi.org/10.3389/fpsy.2022.893534>



- Mansfield, R., Patalay, P. & Humphrey, N. (2020) A systematic literature review of existing conceptualisation and measurement of mental health literacy in adolescent research: current challenges and inconsistencies. *BMC Public Health*, 20(1), 607. Available from: <https://doi.org/10.1186/s12889-020-08734-1>
- Marcus, M., Westra, H. & Mobilizing Minds Research Group. (2012) Mental health literacy in Canadian young adults: results of a National Survey. *Canadian Journal of Community Mental Health*, 31(1), 1–15. Available from: <https://doi.org/10.7870/cjcmh-2012-0002>
- Mehrotra, K., Nautiyal, S. & Raguram, A. (2018) Mental health literacy in family caregivers: a comparative analysis. *Asian Journal of Psychiatry*, 31, 58–62. Available from: <https://doi.org/10.1016/j.ajp.2018.01.021>
- Mokkink, L.B., Terwee, C.B., Patrick, D.L., Alonso, J., Stratford, P.W., Knol, D.L. et al. (2010) The COSMIN study reached international consensus on taxonomy, terminology, and definitions of measurement properties for health-related patient-reported outcomes. *Journal of Clinical Epidemiology*, 63(7), 737–745. Available from: <https://doi.org/10.1016/j.jclinepi.2010.02.006>
- Munawar, K., Mukhtar, F., Choudhry, F.R. & Ng, A.L.O. (2022) Mental health literacy: a systematic review of knowledge and beliefs about mental disorders in Malaysia. *Asia-Pacific Psychiatry*, 14(1), e12475. Available from: <https://doi.org/10.1111/appy.12475>
- Na, S., Ryder, A.G. & Kirmayer, L.J. (2016) Toward a culturally responsive model of mental health literacy: facilitating help-seeking among east Asian immigrants to North America. *American Journal of Community Psychology*, 58(1–2), 211–225. Available from: <https://doi.org/10.1002/ajcp.12085>
- Nejatian, M., Tehrani, H., Momeniyan, V. & Jafari, A. (2021) A modified version of the mental health literacy scale (MHLS) in Iranian people. *BMC Psychiatry*, 21(1), 1–11. Available from: <https://doi.org/10.1186/s12888-021-03050-3>
- O'Connor, M. & Casey, L. (2015) The mental health literacy scale (MHLS): a new scale-based measure of mental health literacy. *Psychiatry Research*, 229(1–2), 511–516. Available from: <https://doi.org/10.1016/j.psychres.2015.05.064>
- Oexle, N., Ajdacic-Gross, V., Kilian, R., Müller, M., Rodgers, S., Xu, Z. et al. (2017) Mental illness stigma, secrecy and suicidal ideation. *Epidemiology and Psychiatric Sciences*, 26(1), 53–60. Available from: <https://doi.org/10.1017/S2045796015001018>
- Paasche-Orlow, M.K., Parker, R.M., Gazmararian, J.A., Nielsen-Bohlman, L.T. & Rudd, R.R. (2005) The prevalence of limited health literacy. *Journal of General Internal Medicine*, 20(2), 175–184. Available from: <https://doi.org/10.1111/j.1525-1497.2005.40245.x>
- Page, M.J., McKenzie, J.E., Bossuyt, P.M., Boutron, I., Hoffmann, T.C., Mulrow, C.D. et al. (2021) The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *International Journal of Surgery*, 88, 105906. Available from: <https://doi.org/10.1016/j.ijsu.2021.105906>
- Peters, M.D.J., Marnie, C., Tricco, A.C., Pollock, D., Munn, Z., Alexander, L. et al. (2020) Updated methodological guidance for the conduct of scoping reviews. *JBI Evidence Synthesis*, 18(10), 2119–2126. Available from: <https://doi.org/10.11124/JBIES-20-00167>
- Rössler, W. (2016) The stigma of mental disorders: a millennia-long history of social exclusion and prejudices. *EMBO Reports*, 17(9), 1250–1253. Available from: <https://doi.org/10.15252/embr.201643041>
- Savage, H., Murray, J., Hatch, S.L., Hotopf, M., Evans-Lacko, S. & Brown, J.S.L. (2016) Exploring professional help-seeking for mental disorders. *Qualitative Health Research*, 26(12), 1662–1673. Available from: <https://doi.org/10.1177/1049732315591483>
- Schneider, M., Jaks, R., Nowak-Flück, D., Nicca, D. & De Gani, S.M. (2021) Mental health literacy in Zurich: a first measurement attempt using the general HLS-EU-Q47. *Frontiers in Public Health*, 9, 723900. Available from: <https://doi.org/10.3389/fpubh.2021.723900>
- Schnyder, N., Panczak, R., Groth, N. & Schultze-Lutter, F. (2017) Association between mental health-related stigma and active help-seeking: systematic review and meta-analysis. *British Journal of Psychiatry*, 210(4), 261–268. Available from: <https://doi.org/10.1192/bjp.bp.116.189464>
- Sirriyeh, R., Lawton, R., Gardner, P. & Armitage, G. (2012) Reviewing studies with diverse designs: the development and evaluation of a new tool: reviewing studies with diverse designs. *Journal of Evaluation in Clinical Practice*, 18(4), 746–752. Available from: <https://doi.org/10.1111/j.1365-2753.2011.01662.x>
- Tambling, R.R., D'Aniello, C. & Russell, B.S. (2021) Mental health literacy: a critical target for narrowing racial disparities in behavioral health. *International Journal of Mental Health and Addiction*, 21, 1867–1881. Available from: <https://doi.org/10.1007/s11469-021-00694-w>
- Terwee, C.B., Prinsen, C.A.C., Chiarotto, A., Westerman, M.J., Patrick, D.L., Alonso, J. et al. (2018) COSMIN methodology for evaluating the content validity of patient-reported outcome measures: a Delphi study. *Quality of Life Research*, 27(5), 1159–1170. Available from: <https://doi.org/10.1007/s11136-018-1829-0>
- Thornicroft, G., Brohan, E., Rose, D., Sartorius, N. & Leese, M. (2009) Global pattern of experienced and anticipated discrimination against people with schizophrenia: a cross-sectional survey. *The Lancet*, 373(9661), 408–415. Available from: [https://doi.org/10.1016/S0140-6736\(08\)61817-6](https://doi.org/10.1016/S0140-6736(08)61817-6)
- Tricco, A.C., Lillie, E., Zarin, W., O'Brien, K.K., Colquhoun, H., Levac, D. et al. (2018) PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Annals of Internal Medicine*, 169(7), 467–473. Available from: <https://doi.org/10.7326/M18-0850>
- Vimalanathan, A. & Furnham, A. (2019) Comparing physical and mental health literacy. *Journal of Mental Health (Abingdon, England)*, 28(3), 243–248. Available from: <https://doi.org/10.1080/09638237.2018.1466050>
- Wang, J., He, Y., Jiang, Q., Cai, J., Wang, W., Zeng, Q. et al. (2013) Mental health literacy among residents in Shanghai. *Shanghai Archives of Psychiatry*, 25(4), 224–235. Available from: <https://doi.org/10.3969/j.issn.1002-0829.2013.04.004>
- Wei, Y., McGrath, P.J., Hayden, J. & Kutcher, S. (2015) Mental health literacy measures evaluating knowledge, attitudes and help-seeking: a scoping review. *BMC Psychiatry*, 15(1), 291. Available from: <https://doi.org/10.1186/s12888-015-0681-9>
- White, M. & Casey, L. (2017) Helping older adults to help themselves: the role of mental health literacy in family members. *Aging & Mental Health*, 21(11), 1129–1137. Available from: <https://doi.org/10.1080/13607863.2016.1206513>
- Wilson, C., Nairn, R., Coverdale, J. & Panapa, A. (2000) How mental illness is portrayed in children's television: a prospective study. *British Journal of Psychiatry*, 176(5), 440–443. Available from: <https://doi.org/10.1192/bjp.176.5.440>
- Wong, D.F.K., Cheng, C.-W., Zhuang, X.Y., Ng, T.K., Pan, S.-M., He, X. et al. (2017) Comparing the mental health literacy of Chinese people in Australia, China, Hong Kong and Taiwan: implications for mental health promotion. *Psychiatry Research*, 256, 258–266. Available from: <https://doi.org/10.1016/j.psychres.2017.06.032>
- Xu, Z., Huang, F., Kösters, M., Staiger, T., Becker, T., Thornicroft, G. et al. (2018) Effectiveness of interventions to promote help-seeking for mental health problems: systematic review and meta-analysis. *Psychological Medicine*, 48(16), 2658–2667. Available from: <https://doi.org/10.1017/S0033291718001265>



Yu, Y., Liu, Z.-W., Hu, M., Liu, X.-G., Liu, H.-M., Yang, J.P. et al. (2015) Assessment of mental health literacy using a multifaceted measure among a Chinese rural population. *BMJ Open*, 5(10), e009054. Available from: <https://doi.org/10.1136/bmjopen-2015-009054>

### SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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