Mental health literacy as theory: Current challenges and future directions

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Abstract

Background: Mental health literacy (MHL) is one increasingly researched factor thought to influence mental health behaviors. Researchers have argued for expanding the definition of MHL to include additional constructs, but no consensus has yet been reached on what constructs should be included as part of MHL.

Aims: The purpose of this paper is to (1) elucidate how the expansion of the MHL construct has impeded the growth of MHL research and (2) through the lens of construct and theory development, highlight how these challenges might be remedied.

Methods: An inclusive search of the literature was undertaken to identify MHL studies. The principles of construct and theory development guided a critical analysis of MHL.

Results: The review of the literature found that MHL violates many principles of what constitutes an acceptable construct definition. To address these concerns, we proposed conceptualizing MHL as a theory and recommended principles of theory development that should be taken into consideration.

Conclusion: A theory of MHL can guide future researchers to clearly delineate important constructs and their interrelationships. For practitioners, a theory of MHL can help inform how to improve MHL at both the individual and community level.

Keywords: mental health literacy; theory development; mental health; construct development

Mental Health Literacy as Theory: Current Challenges and Future Directions

The Evolving Definition of Mental Health Literacy

Research has identified myriad factors related to psychological help-seeking. One factor that has garnered increasing attention is mental health literacy (MHL) (Jorm, 2012). One popular definition of mental health literacy is the "knowledge and beliefs about mental disorders which aid their recognition, management, or prevention" (Jorm et al., 1997, p. 182). MHL developed from the health literacy (HL) literature, which has historically focused on the impact of individuals' basic reading and numeracy skills on health outcomes (Berkman, Sheridan, Donahue, Halpern, & Crotty, 2011). Jorm and colleagues (1997) first argued that HL research did not fully address the knowledge and skills needed to achieve mental health. These scholars suggested that MHL consists of 7 primary components: recognition of mental disorders, knowledge of how to seek mental health information, knowledge of mental health risk factors, knowledge of etiology/causes of mental illness, knowledge of self-treatment, knowledge of professional help available, and attitudes that promote recognition of appropriate help-seeking behavior.

MHL research has established that recognition and knowledge of mental health symptoms can improve help-seeking intentions (Altweck, Marshall, Ferenczi, & Lefringhausen, 2015; Amarasuriya, Jorm, & Reavley, 2015; Mason, Hart, Rossetto, & Jorm, 2015), inform interventions designed to improve one's attitudes toward seeking treatment and one's attitudes toward individuals with mental health symptoms (Anderson & Pierce, 2012; Angermeyer, Holzinger, & Matschinger, 2009; Eack, Newhill, & Watson, 2012; Griffiths, Christensen, & Jorm, 2008; Martensson, Jacobsson, & Engstrom, 2014; Reavely, McCann, & Jorm, 2012), and guide programs that increase people's confidence to aid those experiencing mental health

symptoms (Bond, Jorm, Kitchener, & Reavley, 2015; Mason et al., 2015; Ojio et al., 2015; Olsson & Kennedy, 2010). Despite MHL's established utility, many concerns exist regarding its definition and measurement (Kutcher, Wei, & Coniglio, 2016; O'Connor, Casey, & Clough, 2014; Wei, 2017; Wei, McGrath, Hayden, & Kutcher, 2015; Wei, McGrath, Hayden, & Kutcher, 2016).

Jorm and colleagues' original MHL definition is often considered the "gold standard", but researchers (Kutcher et al., 2016; Wei, 2017; Wei et al., 2015; Wei et al., 2016) have recently advocated for an expanded definition of MHL. This call for expansion mirrors a similar call among HL scholars, in which HL is being reconceptualized as an asset that includes facets of health knowledge (e.g., disease prevention) (Baker, 2006). To keep pace with HL's expanding definition, researchers have argued that MHL should include not only the component of knowledge, but also attitudes, stigma, positive mental health, and help-seeking efficacy related to help-seeking and mental illness (Bjornsen, Eilersten, Ringdal, Espnes, & Moksnes, 2017; Kutcher et al., 2016; Kusan, 2013; Wei, 2017).

These concepts could be important additions to MHL. However, researchers acknowledge that coming to a consensus on what concepts should and should not be included within the construct of MHL will be challenging due to the substantial amount of extant research on each concept (Wei, 2017). Additionally, some researchers prefer to operationalize MHL strictly as mental health knowledge (Chen et al., 2017; Coles et al., 2016; Furnham & Sjokvist, 2017).

The expansion of the MHL construct, combined with the ongoing lack of consensus on MHL's definition, has the potential to create confusion in the literature and risks violating principles of good construct definition. We will delineate these principles, highlight the potential

challenges researchers would face if the MHL construct expands, and propose a parsimonious solution: conceptualize MHL as a theory, rather than a construct. Such framing would allow researchers to attend to important concepts (e.g., attitudes, stigma, positive mental health, and help-seeking efficacy), while avoiding the pitfalls associated with using an expanded MHL construct.

What Characterizes a Good Construct?

The theory-building and psychometric literatures articulate four principles that can help researchers develop a sound construct definition: construct traveling, construct stretching, construct-irrelevant variance, and construct proliferation (Osigweh, 1989; Shaffer, DeGeest, & Li, 2016; Wacker, 2004).

Construct Traveling

A good construct definition is a concise, clear verbal expression of a concept that can be used for strict empirical testing (Osigweh, 1989; Wacker, 2004). Once a construct's definition is precise enough, it can then be defined the same way across several studies (i.e., travel) This facilitates agreement among researchers about what the construct is and is not, and helps ensure consistent measurement/operationalization of the construct across studies (Osigweh, 1989; Wacker, 2004).

Construct Stretching

Construct traveling has an inverse relationship with construct stretching (Osigweh, 1989; Wacker, 2004). Construct stretching occurs when a construct is too broadly defined to the point of losing its meaningfulness. Construct stretching often occurs when researchers do not set boundaries for what a construct is not, and this broad definition can lead to disparate measures of a construct (Wacker, 2004). A clean, concise definition not only facilitates construct traveling

but also helps establish how the construct is theoretically (un)related to other constructs. As Wacker (2004) points out, a stretched construct risks incorporating attributes that are part of an existing construct that already has its own literature base and established instrumentation. Not only can a stretched construct lead to incorporating attributes from already existing constructs, but this can also lead researchers to measure more than they intended to measure.

Construct-Irrelevant Variance

According to the *Standards for Educational and Psychological* Testing (*Standards*; American Education Research Association [AERA], American Psychological Association, & National Council on Measurement in Education, 2014) an instrument that measures more than it is intended to measure is said to measure construct-irrelevant variance. Instruments measuring construct-irrelevant variance can create tautological studies where the measured variable is correlated with itself, thus reducing the validity of resulting scientific conclusions.

Construct Proliferation

Lastly, expanding the definition of a construct can create challenges with construct proliferation. Construct proliferation occurs when researchers propose a "new" construct when this construct already exists by a different name in the literature (Shaffer et al., 2016). Few studies examine discriminant evidence of validity for theoretically-related constructs, which impedes the development of parsimonious theory, creation of cumulative knowledge, and influence of scientific disciplines on each other (Le, Schmidt, Harter, & Lauver, 2010; Pfeffer, 1993; Schwab, 1980).

MHL's Limitations as a Construct

MHL's expanding definition has significantly impeded the construct's ability to be defined the same way across studies. Specifically, certain scholars have conceptualized MHL as

mostly a mental health knowledge construct (Jorm et al., 1997), as mental health knowledge including attitudes, stigma, and help-seeking efficacy (Kutcher et al., 2016), or as knowledge that benefits mental health (Bjornsen et al., 2017). As the MHL construct expands, confusion about how and what to measure has resulted. For example, O'Connor et al. (2014) examined 13 scale-based MHL measures and found 12 included attributes not included in Jorm and colleagues' (1997) original definition, while other scholars have called for using separate stigma, attitudes, help-seeking efficacy, positive mental health, and mental health knowledge scales to measure MHL (Bjornsen et al., 2017; Wei et al., 2015; Wei et al., 2016). What this definitional inconsistency has created are several studies reporting that MHL is correlated with other constructs, but comparison of these studies is difficult as they vary in what concepts they include under the conceptual umbrella of MHL (Compton, Hankerson-Dyson, & Broussard, 2011; Evans-Lacko et al., 2010; Furnham, Cook, Martin, & Batey, 2011; Lauber, Ajdacic-Gross, Fritschi, Stulz, & Rossler, 2005). Additionally, many measures of MHL are either psychometrically lacking or do not report their psychometric properties (O'Connor et al., 2004; Wei, 2017). We see greater potential in establishing a shared definition of MHL that can lead to consistent measurement, than in continuing to struggle with how the expanding MHL construct should be measured.

The inclusion of attitudes, stigma, positive mental health, and help-seeking efficacy in MHL's content domain simply repackages these well-established constructs into a broader construct with a new name (i.e., construct proliferation) which can create confusion among researchers (Shaffer et al., 2016). For example, the repackaging of positive mental health into MHL creates the potential for construct stretching. Bjornsen et al. (2017) argued that positive MHL should be based in Basic Psychological Needs Theory while Kusan (2013) argued that

MHL should include various constructs of positive psychology such as resilience and mindfulness. Both perspectives highlight the importance of empowering individuals to manage their mental health, but no boundaries are set for what positive mental health constructs should be included or excluded. This lack of agreement can lead to disparate measures of the same construct.

Construct proliferation can also create issues with discriminant validity. Help-seeking efficacy (i.e., self-efficacy related to mental health) is closely related to the theory of planned behavior (TPB; Ajzen, 1985) construct of perceived behavioral control (PBC), in that it encompasses the skills, capacities, and resources available to an individual seeking treatment (Wei, 2017). By including help-seeking efficacy within MHL, researchers appear to have repackaged an already well-established construct without a clear rationale. One rule of formulating a strong conceptual definition is to clearly delineate the concept from seemingly similar concepts (Wacker, 2004). To our knowledge, the literature has not addressed how help-seeking efficacy is distinct from perceived behavioral control. MHL and PBC have demonstrated a positive relationship (Anderson & Pierce, 2012; Bond et al., 2015; Hernandez & Organista, 2013; Kitchener & Jorm, 2002), but correlating help-seeking efficacy with PBC without establishing discriminant validity might mean correlating help-seeking efficacy with itself (i.e., tautology).

The inclusion of attitudes has created similar challenges in measurement. The most frequently used MHL instrument is Jorm's Vignette Interview (Jorm et al., 1997). Recently, researchers have acknowledged this measurement tool is inadequate as it does not capture all components of MHL (Kutcher et al., 2016), and it confounds knowledge with beliefs (O'Connor et al., 2014). Specifically, the perceived helpfulness of mental health professional items are

described as measuring a person's knowledge of helping professionals, despite such items typically being used to measure help-seeking attitudes (Fischer & Farina, 1995). Given that researchers have expressed interest in quantifying the relationship between MHL and attitudes (Amarasuriya et al., 2015; Battaglia, Coverdale, & Bushong, 1990; Bond et al., 2015; Esters, Cooker, & Ittenbach, 1998; Kitchener & Jorm, 2002), this requires that researchers define and operationalize MHL such that attitudes is not a dimension of MHL nor a part of MHL's content domain. Quantifying such a relationship is predicated on the assumption that the two things are independent constructs. Thus, if a MHL instrument unwittingly measures attitudes, then measuring the true relationship between attitudes and MHL becomes impossible.

A similar issue arises related to MHL and stigma. Researchers have focused on increasing MHL to decrease stigmatized beliefs toward people with mental illness (Bond et al., 2015; Eack et al., 2012; Griffiths et al., 2008). A lack of mental health knowledge is viewed as a driver of prejudice toward individuals with mental illness, which then leads to discriminatory behavior. While this perspective has benefits such as framing MHL as an asset rather than a risk factor, the construct definition principles must be considered. While including stigma within MHL might be tempting, as mental health knowledge and stigma are strongly correlated (Bond et al., 2015; Eack et al., 2012), researchers run the risk of confusing an outcome (i.e., stigma) as being part of the construct itself (i.e., MHL). In developing a construct, researchers are establishing the relationship among variables and these relationships must be empirically testable (Osigweh, 1989; Wacker, 2004). Researchers run the risk of including these outcomes as part of the construct itself (Osigweh, 1989). As described above regarding attitudes, the inclusion of stigma under the umbrella of MHL may cloud rather than clarify our understanding of the relationship between MHL and stigma, which researchers have already begun to examine. Thus,

a clear distinction must be made between knowledge and stigma-related beliefs to move MHL scholarship forward.

MHL's Strengths as a Theory

MHL's expanding definition has created questions about the definition, breadth, and measurement of the construct (Kutcher et al., 2016; O'Connor & Casey, 2015; O'Connor et al., 2014; Wei, 2017). Questions facing the field are how do we (1) bring consistency to the construct definition, (2) address construct stretching, construct travelling, construct proliferation, and construct-irrelevant variance, (3) and facilitate valid and reliable measurement of the construct? We believe reconceptualizing MHL as a theory (i.e., a precise outline of variables in a specific domain that explains how and why variables are linked to predict certain outcomes) answers these questions, and we identify four reasons below (Wacker, 2004).

First, reconceptualizing MHL as a multi-construct theory, rather than a multidimensional construct, allows us to keep the constructs of mental health knowledge, stigma, attitudes, positive mental health, and help-seeking efficacy separate, narrow, and concise. As established above, narrow construct definitions facilitate more precise measurement that allows researchers to better compare results across studies and reduces the risk of construct proliferation (Shaffer et al., 2016). Importantly, this independence of constructs encourages the field to develop more valid and reliable measures for the historical heart of MHL: mental health knowledge. Mental health knowledge alone contains several dimensions (i.e. how to seek mental health information, knowledge of risk factors, knowledge of etiology) and is thus deserving of a multidimensional instrument. However, no psychometrically robust measures, nor agreement about what concepts underlie the mental health knowledge construct, exists (O'Connor et al., 2014; Wei, 2017). Without sound measures of mental health knowledge, researchers will be unable to confidently

establish the efficacy of various MHL interventions or the influence mental health knowledge has on attitudes, stigma, positive mental health, and help-seeking efficacy.

Second, framing MHL as a theory will push the field to clearly define the interrelationship among attitudes, stigma, help-seeking efficacy, positive mental health, and mental health knowledge. As it stands, MHL is only an approximation of theory, as it specifies types of variables people should consider without any specification of the direction and strength of the relationships among these variables (Weick, 1995). Good theory can provide an explanation of how constructs related to MHL interact (Lynham, 2002). Research has uncovered correlations between mental health knowledge and attitudes (Amarasuriya et al., 2015), stigma (Bond et al., 2015; Eack et al., 2012; Griffiths et al., 2008), and help-seeking efficacy (Anderson & Pierce, 2012; Hernandez & Organista, 2013; Kitchener & Jorm, 2002), but how these variables interact has not been clearly delineated.

Third, theory can guide the MHL field to focus on the degree that MHL impacts various mental health behaviors. Good theory articulates how variables interact to predict a specific outcome (Lynham, 2002). According to Jorm et al. (1997), the outcomes of MHL are recognition, management, and prevention. Framing MHL as a theory challenges researchers to examine how these constructs interact to affect the outcomes of recognition, management, and prevention.

Fourth, by allowing mental health knowledge, attitudes, stigma, positive mental health, and help-seeking efficacy to remain as independent constructs, MHL researchers properly acknowledge the well-developed literature that explicate these constructs. These constructs have been studied across the social sciences and each has increased our understanding of the factors that drive health behaviors, which explains these constructs' inclusion in popular help seeking

theories and models (e.g., TPB (Ajzen, 1985); Health Belief Model (Kirscht, 1974); Social Cognitive Theory (Bandura, 1986)). By continuing to refer to these constructs by their original names, transdisciplinary exploration of how these constructs interact in the context of MHL will be enhanced. In summary, we conclude that the term "mental health literacy" may best be used as a label for a theory of literacy, rather than a label for a construct at odds with the principles of good construct definition. If MHL is to be a theory, then future research needs to address several aspects of theory development.

Future Directions for MHL

Conceptualizing MHL as a theory has several implications from both a research and practice perspective. Both of these perspectives will be highlighted below.

Research Implications. A first rule of good theory is "good theory presents clearly defined constructs and offers clear, thorough, and thoughtful explanations of how and why constructs are linked" (Klein & Zedeck, 2004, p. 932). To further MHL as a theory, researchers must (1) agree upon what forms of mental health knowledge should be incorporated into the mental health knowledge construct and (2) be explicit about the interrelationships among the various constructs invoked by the theory. If this rule of good theory can be met, then this will lend itself to the second rule of good theory: good theory is testable (Klein & Zedeck, 2004). Once relevant constructs are identified, defined, and their interrelationships articulated, scholars can use empirical methods to vet the incremental utility of these constructs for continued inclusion in a theory of MHL. For example, does mental health knowledge account for unique variance in help seeking behavior beyond the variance accounted for by attitudes and other key help-seeking related constructs? Constructs that fail to demonstrate utility can be excised from a

theory of MHL, and promising constructs can be tested as potential replacements (Lynham, 2002).

A theory of MHL can also be pitted against other prominent theories: what can a theory of MHL elucidate that is not already accounted for by other theories? A good theory offers novel insights and does not simply "reinvent the wheel" (Lynham, 2002; Wacker, 1998). For example, the TPB assesses attitudes, subjective norms, and perceived behavioral control related to health behaviors. How would a theory of MHL, which may include attitudes and help-seeking efficacy, do a better (or worse) job of helping scholars and stakeholders understand mental health treatment seeking behavior? Close consideration of competing theories can help MHL scholars make intentional decisions about how to shape the theory of MHL to provide new insights to the literature.

Theory development is an iterative process, involving exploration, explanation, and validation (Kerssens-van Drongelen, 2001). The iterative process of theory development explicated above is essential as the continued growth of MHL means several theories, with dissimilar constructs, could potentially be developed. Future research elucidating the interrelations among key MHL variable could benefit transdisciplinary collaboration by identifying a shared MHL framework. The MHL field has already initiated the exploration process, as variables of interest have been named. However, the nature of constructs (e.g., mental health knowledge) and their interrelations require further development along the lines articulated above. Once these tasks are addressed, we can begin to empirically test a theoretical model of MHL. Model testing will lead to model refinement, which will result in a theory of MHL that balances parsimony with explanation.

Practice Implications. A theory of MHL can also help practitioners, program developers, and policy makers make informed decisions about how to improve MHL at both the individual and community level. When the nature and interrelationships of each help seeking construct underlying a theory of MHL are clearly defined, practitioners can make more intentional choices about which variables to target with their MHL interventions (e.g., symptom recognition vs. knowledge of self-help strategies). Program developers can more validly and reliably measure the effectiveness of their MHL programs; consistent comparison of program outcomes across different investigations and populations becomes realistic. Policy makers can make evidence-based funding and protocol decisions grounded in empirical findings regarding the specific MHL-related variables shown to best facilitate recognition, management, and prevention (Jorm et al., 1997). A theory of MHL could provide a shared language that facilitates unity of vision and action among diverse professionals seeking to improve literacy for the good of all.

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