



## OPEN ACCESS

## EDITED BY

Chao Liu,  
Huaqiao University, China

## REVIEWED BY

Khadijeh Aghaei,  
Gonbad Kavous University, Iran  
Hongju Pae,  
Active Inference Institute Inc., United States

## \*CORRESPONDENCE

James Meaden  
✉ jmeaden@masonlive.gmu.edu

RECEIVED 01 May 2025

REVISED 08 December 2025

ACCEPTED 12 December 2025

PUBLISHED 12 January 2026

## CITATION

Meaden J (2026) Framing the mind: media, metaphors, and mindfulness. *Front. Soc. Psychol.* 3:1621640. doi: 10.3389/frsps.2025.1621640

## COPYRIGHT

© 2026 Meaden. This is an open-access article distributed under the terms of the [Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

# Framing the mind: media, metaphors, and mindfulness

James Meaden\*

Independent Researcher, Leesburg, VA, United States

Mindfulness has been studied in media and communication research as an individual capacity for regulating attention, managing distraction, and critically engaging with content. This perspective paper introduces an alternative approach, one that recognizes that mindfulness is strongly influenced by environments, including media environments. Drawing on the environmental model of mindfulness, this paper examines how dominant metaphors of mind, especially container-based metaphors prevalent in and propagated by digital media, may unintentionally make mindfulness harder to achieve. Building on this insight, an expanded role for media literacy is proposed, one that includes awareness of the effects of language and metaphor on the capability for present-moment awareness. This perspective opens new avenues for research and design by illuminating how media environments can support, or unintentionally suppress, mindfulness.

## KEYWORDS

cultural psychology, environmental model of mindfulness, media and communication studies, media literacy, metaphor, mindfulness, self-construal

## 1 Introduction

In media and communication studies, mindfulness is increasingly presented as a personal resource for managing distraction, regulating emotion, and consuming digital media more consciously (e.g., Liu et al., 2023). Within this framing, media environments are often treated as stable, external contexts that passively convey information rather than as active forces that shape cognition and experience. As a result, research has focused on the individual and their ability to sustain mindfulness while the influence of media systems on mindfulness remains underexamined.

This paper offers an alternative approach. Rather than asking how individuals can be more mindful within modern media environments, the central question becomes: How do modern media environments influence whether mindfulness becomes more or less likely to arise in the first place? This reframing draws on emerging research suggesting that mindfulness is not only a dispositional trait—as in models of trait mindfulness (e.g., Brown and Ryan, 2003)—but is also influenced by different environments. From this view, mindfulness is not solely achieved via individual effort (e.g., meditation, yoga); it also emerges effortlessly and spontaneously when the conditions are right. This paper builds upon the environmental model of mindfulness (EMM; Meaden, 2024), a framework that conceptualizes mindfulness as an emergent property of specific environmental contexts. Drawing from ecological psychology (Gibson, 1979), cognitive anthropology (D'Andrade, 1995), and cultural evolution (Henrich, 2015), the EMM outlines how specific features of an environment (i.e., immediacy of feedback, learning and work structures,<sup>1</sup> natural landscapes, cultural narratives) support or suppress the capacity for mindfulness.

<sup>1</sup> For example, whether tasks are embodied and sensory-based or abstract and symbolically mediated.

The focus of this paper is on one environmental feature identified by the EMM as having a foundational influence on mindfulness: cultural narratives of selfhood. In particular, it examines self-construal—how the self is understood and experienced in relation to others and to the world (Markus and Kitayama, 1991). According to the EMM, when the self is experienced as interconnected, individuals spend less time “in their heads” trying to manage their thoughts and emotions, and spend relatively more time focusing their awareness out into the world around them (Schutte and Malouff, 2018; Iyengar and Lepper, 1999; Kitayama et al., 2004; Markus and Kitayama, 1991). In contrast, when the self is experienced as internalized, separate from the external world, and autonomous, attention is drawn inward (Lillard, 1998; Markus and Kitayama, 1991), increasing self-referential processing and thereby reducing mindfulness.

By exploring how digital media environments shape self-construal through narrative and metaphor, this paper aims to broaden how the mindfulness–media relationship is understood. In doing so, it contributes to a growing movement to expand the concept and practice of media literacy (e.g., Cho et al., 2024) by encouraging critical analysis of how media systems might influence mindfulness.

The sections that follow introduce the EMM and its relevance to media and communications research, examine how dominant metaphors of mind in modern media systems influence self-construal and mindfulness, and propose an expanded model of media literacy that incorporates critical examination of the ways in which media influence models of selfhood and the capability for mindfulness.

## 2 Clarifying key constructs and theoretical model

First, it is helpful to clarify how key constructs are defined and how they relate within this paper. Consistent with the EMM, this analysis focuses on how cultural and media environments shape attention and self-construal, rather than on underlying cognitive or neural mechanisms.

*Mindfulness* is conceptualized as a category of concrete cognitive styles characterized by present-focused, externally-oriented awareness (Meaden, 2024). Drawing on cognitive styles theory (Kozhevnikov et al., 2014), the EMM positions mindfulness as a mode of attention that engages with immediate sensory experience rather than abstract and self-referential thought.

*Self-construal* refers to how individuals perceive and define themselves in relation to others and their environment (Markus and Kitayama, 1991). In the EMM, self-construal functions as an attentional orientation: independent self-construal draws attention inward toward mental states, while interconnected self-construal directs attention outward toward the environment and relationships (Markus and Kitayama, 1991; Meaden, 2024).

*Metaphor*, following Lakoff and Johnson (1980a,b), operates as a cognitive scaffold that shapes how abstract concepts, including one's self-concept, are understood and experienced. In this paper, metaphor is treated as a mechanism through which cultural environments, including media, influence self-construal.

*Environment* encompasses the socioecological contexts that shape cognitive styles, including physical landscapes, social structures, cultural narratives, and—for this paper's focus—media systems. The EMM examines how different environmental contexts support or suppress mindfulness; this paper extends that analysis to digital media as a significant environmental factor shaping the metaphors of mind to which individuals are exposed.

These constructs relate in a directional chain: media environments circulate metaphors of mind, which shape self-construal, which influences mindfulness. Mind model literacy (MML; see Section 6) is proposed as a skill that would moderate the relationship between metaphors of mind and their influence on self-construal, such that individuals high in MML would be less susceptible to changes in their self-construal following exposure to different metaphors of mind.

## 3 The environmental model of mindfulness

The EMM emphasizes that mindfulness does not arise in a vacuum but is an emergent property of environmental conditions (Meaden, 2024). Specifically, the EMM identifies four structural features of environments (i.e., feedback immediacy, learning and work structures, nature exposure, and cultural narratives of selfhood) that can support or suppress mindfulness. Rather than replacing intrapersonal models of mindfulness, the EMM extends them by highlighting the contextual factors that influence whether mindfulness emerges spontaneously or requires intentional effort.

One illustration of the EMM comes from research on immediate-return societies<sup>2</sup> (i.e., egalitarian foraging societies, in which resources are acquired and consumed in the short term without accumulation or long-term planning; see Woodburn, 1982). These environments offer insight into the social and ecological conditions that can support mindfulness (here and throughout, mindfulness is used in the EMM sense: a context-sensitive, present-oriented mode of attention supported by environmental conditions; this usage is heuristic, not a claim that modes of awareness in some immediate-return societies are equivalent to contemporary definitions of mindfulness). In small-scale, immediate-return societies, such as the Pirahã of the Amazon and the Mbuti of the Congo Basin, actions yield direct, observable consequences, and daily life is organized around immediate needs and experiences (Brunton, 1989; Martin, 1999; Woodburn, 1982). Everett (2010) describes how the Pirahã place a strong emphasis on present-moment awareness, while Turnbull (1983) shows how the Mbuti treat speculation about distant times or abstract concepts as less important or meaningful than direct, lived experience. As Martin and Shirk (2008) note, the relatively immediate feedback in such contexts fosters an orientation toward the present that has substantial overlap with what contemporary psychology describes as mindfulness (Meaden, 2024). Importantly, this does not mean these communities are

<sup>2</sup> The term *immediate-return society* is useful as a broad contrast with delayed-return systems, but it should not be understood as a fixed or deterministic classification.

inherently “more mindful” in the exact way that contemporary psychology defines it, only that there are important and meaningful similarities.

One of the most influential components of these socioecological systems on attentional patterns is the cultural stories and metaphors that convey information about how the self is construed. Importantly, self-construal is not just a belief or an identity claim, it also functions as an attentional orientation (Markus and Kitayama, 1991). Many modern societies, especially those shaped by Western heritage and institutions, promote a bounded, autonomous model of the self (Lillard, 1998; Markus and Kitayama, 1991). Here, the individual is encouraged to monitor internal states, optimize personal outcomes, and construct a curated identity, all of which draw attention inward (Lillard, 1998; Luhmann, 2021; Markus and Kitayama, 1991). Mindfulness, in this context, is less environmentally supported; it must be intentionally cultivated, often in resistance to dominant cultural pressures (Meaden, 2024). In contrast, interconnected models of selfhood, more common among small-scale societies, define the self through connection: with others, with land, with natural systems (Meaden, 2024). Because of this, individuals may spend less time monitoring their inner narrative and more time attending to the external world (Lillard, 1998; Luhmann, 2021; Markus and Kitayama, 1991). When individuals experience the self in this way, mindfulness-like attentional qualities can emerge as a natural byproduct of everyday participation in the socioecological system.

These differences in self-construal have deep historical roots. As human societies transitioned from immediate-return systems—where meaning emerged through perception and interaction—to delayed-return systems built around hierarchy, planning, and symbolic abstraction (Martin and Shirk, 2008; Meaden, 2024; Woodburn, 1982), attention decoupled from the immediate moment. Attention began to move from the shared world to the interior world, from what is happening now to what is remembered, imagined, or anticipated (Forde and Douglas, 1956; Martin, 1999; Salali and Migliano, 2015; Woodburn, 1982). Christian religious traditions reinforced this shift by prioritizing inner mental states (e.g., belief, intention, will) over observable behavior (Dumont, 1982; Keane, 2007; Luhmann, 2021). The mind, once experienced as being embedded in context (Gill, 2009), became an isolated container of identity (e.g., Descartes’ declaration, “I think, therefore I am”; Lillard, 1998; Wilkes, 1988). Over time, these cultural changes concretized an increasing internalization of awareness.

## 4 Models of mind

Cultural metaphors of mind have played a central role in this transformation. Metaphor, as with language in general, does more than describe thoughts; it actively shapes them (Lakoff and Johnson, 1980a,b). From infancy, language offers not only a means of communication but a cognitive scaffold for organizing experience, guiding attention, and shaping how we relate to ourselves and the world (Vygotsky, 1978). In many modern Western societies, language and cultural narratives reinforce the container metaphor: the mind is a bounded space that stores

mental objects.<sup>3</sup> We “grasp an idea,” “hold a belief,” “let our feelings out,” or “dig deep into our thoughts” (Lakoff and Johnson, 1980a,b). Such metaphors subtly encode a model of cognition as internal possession, as something that happens inside an enclosed mental space, separate from the body and external world. They also imply effort, that attempts should be made to monitor and control the events occurring in this private container. Importantly, these container metaphors also reflect broader social logics. They reinforce the liberal ideal of the self as autonomous and bounded, and in contemporary contexts, the neoliberal expectation that individuals must monitor and optimize their inner states. In this sense, container metaphors of mind align with cultural and social frameworks that frame attention and mental health as individual responsibilities rather than collective or systemic concerns (Powell, 2025). Frequent exposure to these particular metaphors habituates inwardly focused attention, pulling one out of present-moment awareness. In contrast, interconnected metaphors of self support mindfulness by continually orienting awareness into the external world, into events and relationships. Four types of metaphors of mind that support this kind of externally-oriented awareness are discussed briefly below as a contrast to the dominant container model in the West.

### 4.1 Mind as receptive awareness

Some cultures experience thinking not as a process of internal generation but as a form of listening. Among the Pintupi of Australia, the same term—*kulinipa*—is used for “thinking,” “understanding,” and “hearing” (Myers, 1991). Revealingly, when anthropologists described the Western assumption that individuals “make their own thoughts,” Pintupi participants responded with disbelief and laughter (Petchkovsky, 2000).

### 4.2 Mind as shared relational space

In contrast to the container model of the mind as a private, bounded entity, some cultures locate cognition within relationships. Many North American Indigenous groups describe minds as existing between people rather than within individuals, emphasizing the co-constructed nature of mental content (Mehl-Madrona and Pennycook, 2009). Among the Ilongot of the Philippines, mental life is not individualized but distributed:

<sup>3</sup> The “container” metaphor, where the mind is framed as a bounded space housing thoughts, emotions, and memories, is prominent in many Western cultural narratives. However, models of mind and self are not homogeneous within any culture. Research on self-construal shows substantial variation within cultural contexts (Markus and Kitayama, 1991). Moreover, Western intellectual history itself contains powerful countercurrents to the inward-turning trajectory often attributed to modernity. Romanticism, for example, emerged as a response to Enlightenment rationalism, emphasizing sensorial and emotional experience (Taylor, 1989). Contemporary movements such as 4E cognition (Newen et al., 2018), somatic therapies (Kuhfuß et al., 2021), and acceptance and commitment therapy’s “Self as Context” metaphor (Hayes et al., 1999) promote embodied, relational, and situated forms of awareness.

What happens between people is prioritized over internal mental states (Lillard, 1998). Similarly, Māori epistemologies emphasize relationality, viewing cognition as something that emerges through lived, context-specific interactions, rather than through the manipulation of abstract, decontextualized categories<sup>4</sup> (Rout and Reid, 2020).

### 4.3 Self and environment as unified field

In some cultural contexts, the distinction between self and environment is softened or dissolved entirely. Among the Kanak of New Caledonia, self and world are described as interpenetrating: “Each plays its own role, but each lacks distinct boundaries” (Leenhardt, 1979, p. 74). The Pintupi of Australia often refer to specific places in the first person, experiencing locations as extensions of the self (Myers, 1991). The Mbuti of the Congo Basin describe the forest in kinship terms—as “mother” or “father”—underscoring their felt relationship with ecological systems (Turnbull, 1965). Māori cosmologies view the world as inherently connected, a “web of subjects who share whakapapa (genealogy),” and this interconnectedness is communicated through narrative (Rout and Reid, 2020, p. 952).

### 4.4 Mental processes as externally arising

Another distinction from the containerized model of mind concerns the locus of cognitive agency. Some cultural languages demonstrate limited linguistic or conceptual emphasis on internal mental states. The Chewong of Malaysia reportedly have only five terms for mental processes, and the Kanak language contains few references to internal psychological experiences (Lillard, 1998). Pintupi understanding involves a “projection of the basis of autonomy outside the individual,” suggesting that thoughts and decisions arise from the relational field rather than from internal deliberation (Myers, 1991, p. 125).

While each of these metaphor types offer a distinct way of conceptualizing the mind, what they share is a reduced prioritization of, and identification with, mental processes, compared to the containerized model of mind. These models provide reference points and contrasts against which the influence of the container metaphor on an individual’s capability for mindfulness becomes more clear.

## 5 Metaphors of mind in modern media

In today’s digital media landscape, metaphors that reinforce the container model of mind are not only common, they are culturally

dominant. This model frames the mind as a bounded, internal space: a mental container that stores thoughts and emotions, must be regulated, and can become cluttered, disorganized, or “full.” These metaphors are not confined to productivity hacks or self-help blogs, but appear across the media ecosystem, shaping how mental life is framed and understood.

For example, a Psychology Today article describes “mental clutter” as “a state of mind in which you can’t inhibit irrelevant information” (Whitbourne, 2017), reinforcing the idea that psychological wellbeing depends on maintaining order within an internal mental space. Across mainstream wellness and psychology content, the mind is portrayed as a finite container, something that can be overfilled or overloaded if not properly managed. These are not just casual expressions; they encode and normalize a cognitive model in which mental life occurs within an interior space, a space that needs to be cleaned, emptied, or organized from within.

This metaphorical logic extends even into the design of mindfulness interventions themselves. Popular platforms like Calm and Headspace, whose stated aim is to cultivate present-moment awareness, often rely on the same container-based framing. A Calm blog post advises readers: “Instead of trying to keep everything swirling in your head, do a brain dump and write everything down” (Calm, n.d.). Headspace similarly encourages users to “step back from our constant stream of thoughts, and instead, make space in the mind to focus and become aware of the moment” (Headspace, n.d.). In both cases, mindfulness is framed not as relational attunement to the world, but as internal housekeeping, involving the management of a cluttered room inside the head. These metaphors are rarely questioned. Through repeated exposure, they become naturalized and habitual, and reinforce the experience of mind as an enclosed interior space requiring constant regulation and surveillance. Attention is thereby directed inward, reinforcing a model of self that is bounded and individual rather than relational or environmentally embedded. Even the features of these apps, such as choosing the guide’s voice, setting the session length, or selecting goals like sleep, anxiety reduction, or productivity, extend this logic further. By presenting mindfulness as a customizable service for managing internal states, these features implicitly reinforce the container model of mind, framing mindfulness as an individual responsibility rather than a byproduct of the broader sociocultural environment.

The container metaphor also appears in therapeutic settings. One trauma therapy technique, literally called the “Container Method,” invites individuals to imagine a mental “vault” in which distressing thoughts or emotions can be stored until a safer time for processing. As McAdam (2024) explains: “The container can hold these triggers for a time until it feels less threatening to talk about or think about them.” In some versions, this imagined container is placed within the broader “space of the mind,” creating a metaphorical container within a container. Here, the metaphor becomes not just linguistic but also procedural: it is enacted as a therapeutic tool. The model of mind implied is not only internalized but hierarchically layered, reinforcing the idea that mental life consists of compartmentalized elements that must be spatially managed.

This matters. If present-moment awareness is shaped by the metaphors of mind embedded in a cultural context, then modern

<sup>4</sup> In many Western traditions, cognition is treated as the ability to reason using universal categories or mental constructs (e.g., “truth,” “object,” “emotion”) that are thought to exist independently of any particular social or environmental context. By contrast, relational models—such as those found in Māori thought—see knowledge as emerging through ongoing interactions between people, place, and history (Rout and Reid, 2020).

digital media platforms, saturated with containerized models of mind, are not neutral. They actively influence the audience's self-construal and capabilities for mindfulness. Of course, no single blog post or app feature reshapes self-construal on its own. The EMM describes how entire socioecological systems shape cognition over time. Digital media operate similarly. What matters is cumulative exposure to container metaphors across platforms, wellness content, therapeutic frameworks, and everyday language. It is this cultural saturation, not any one source, that shapes self-construal and attentional orientation, including mindfulness, over time.

If mindfulness is influenced by metaphors of mind, and if digital media are among the most immersive and ubiquitous environments transmitting those metaphors and shaping modern cognition (Chan, 2022; Firth et al., 2019; Shanmugasundaram and Tamilarasu, 2023), then a deeper investigation is warranted. This raises an urgent question for media and communication researchers: What models of mind are being normalized by modern media environments? And how do these shape self-construal, attentional orientation, and the capacity for mindfulness?

The next section explores how media literacy can begin to meet this challenge by equipping individuals to recognize, question, and engage with the metaphors of mind that shape experience.

## 6 Mind model literacy

Traditional approaches to media literacy emphasize critical consumption—spotting bias, analyzing representation, and deconstructing narratives (Jeong et al., 2012). However, these approaches may be limited for understanding how contemporary media environments condition models of self. Media have always influenced cognition (Entman, 1989; Page et al., 1987), but today's digital environments do so with unprecedented scale, subtlety, and specificity. What matters is not only what we consume but how our models of mind and self are shaped in the process.

To address this gap, we propose MML, the capacity to recognize how metaphors of mind, embedded in and circulated by media environments, shape self-construal and attentional orientation. Where traditional media literacy asks how messages are constructed and what ideologies they convey, MML asks what models of mind those messages assume and reinforce. This reframing draws on the insight that media function not only as channels of communication but as environments that shape how the self is experienced (see Figure 1). MML involves three interrelated capacities:

### 6.1 Recognizing metaphors of mind

The first capacity involves identifying the implicit models of mind embedded in media content. Across wellness apps, podcasts, and productivity tools, metaphors of mind often frame the self as a container, processor, or manager (i.e., isolated, bounded, and inward-facing). MML cultivates awareness of these framings. For instance, students might analyze language used in wellness and productivity applications, looking for phrases such as “organize your thoughts,” “master your emotions,” or “optimize

your focus,” and identify the container model underlying them (see Table 1). By learning to recognize metaphors of mind as cognitive blueprints rather than neutral descriptors, individuals become attuned to how culturally dominant language shapes self-construal and influences mindfulness.

### 6.2 Understanding effects on attention

The second capacity involves understanding how metaphors of mind influence attentional orientation. Container metaphors scaffold an attentional style oriented toward internal monitoring rather than external engagement. MML encourages reflection on how different media environments train different attentional habits. Students might, for example, keep an “attention journal” tracking how various platforms affect their awareness, perhaps noting how a meditation app encourages internal scanning or how social media triggers recursive self-evaluation (see Table 1). Through exercises like these, learners begin to recognize how attention is influenced by cultural contexts, including predominant metaphors of mind.

### 6.3 Engaging alternative metaphors

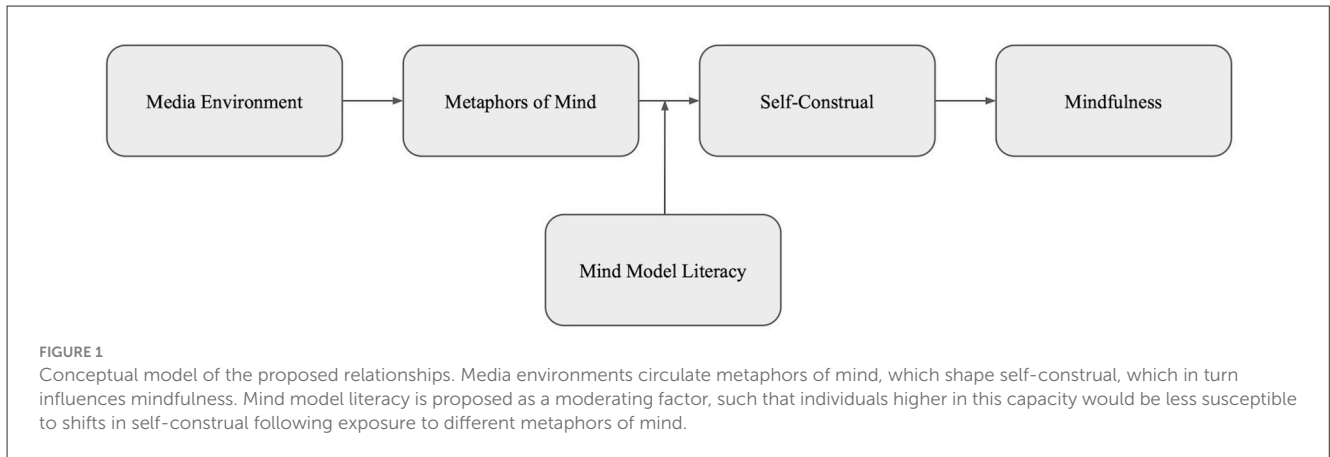
The third capacity involves actively engaging with alternative metaphors that support interconnected self-construal and outward-oriented attention. Rather than framing the mind as a container to be managed, alternative metaphors might emphasize flow, relational embeddedness, or environmental attunement: for example, “let things settle,” “notice what's pulling your attention,” or “tune in to your surroundings” (see Table 1). By practicing these alternative framings, individuals may begin to shift their habitual attentional orientation.

This expanded literacy builds upon traditional media critique. Rather than asking how messages are constructed and what ideologies they convey, MML asks: What models of mind do they normalize? And how do those models shape attentional orientation and the capacity for mindfulness? In this view, MML becomes a practice for recognizing, and potentially reshaping, media environments that support mindfulness. This reframing opens new roles for educators, designers, and researchers, to not only interpret media content but to also examine and redesign the media environments that shape how minds are modeled.

## 7 Conclusion

This paper introduces the EMM to media and communication researchers and practitioners, offering a reframing of mindfulness as a context-sensitive mode of awareness shaped by environmental conditions. The EMM highlights how cultural metaphors of mind contribute to the emergence or suppression of mindfulness by shaping self-construal and attentional orientation.

The utility of this model was demonstrated by examining how container metaphors of mind, widely circulated in modern digital media environments, directly influence self-construal and indirectly influence mindfulness. These metaphors reinforce



**FIGURE 1** Conceptual model of the proposed relationships. Media environments circulate metaphors of mind, which shape self-construal, which in turn influences mindfulness. Mind model literacy is proposed as a moderating factor, such that individuals higher in this capacity would be less susceptible to shifts in self-construal following exposure to different metaphors of mind.

**TABLE 1** Three dimensions of mind model literacy, with example learning activities and intended outcomes.

Dimension	Definition	Example	Learning outcome
Recognizing metaphors of mind	Identify the implicit models of mind embedded in media content.	Students analyze language in wellness apps and productivity tools, noting phrases like “manage your emotions,” “clear your head,” or “organize your thoughts,” and identify the container model underlying them.	Metaphors of mind are revealed as cognitive blueprints that shape self-construal and attention, not neutral descriptions.
Understanding effects on attention	Understand how metaphors of mind influence attentional orientation.	Students keep “attention journals” documenting how different platforms shape awareness: noting how a meditation app encourages internal scanning or how social media triggers recursive self-evaluation.	Attention is reframed as a context-sensitive orientation shaped by absorbed models of mind, enabling critical reflection on media use.
Engaging alternative metaphors	Actively engage with alternative metaphors that support interconnected self-construal and outward-oriented attention.	Students practice reframing internal states using alternative metaphors. For example, replacing “empty your mind” with “notice what’s around you,” or “control your thoughts” with “let things settle,” and then reflecting on how these framings shift their experience.	Alternative metaphors become accessible tools for shifting attentional orientation toward conditions that support mindfulness.

bounded, individualized notions of the self and orient attention toward inner mental dialogue, making mindfulness more elusive and requiring deliberate effort to cultivate.

This perspective yields two key implications. First, it positions digital media not as passive backdrops but as active environmental forces that shape models of mind, and through them, attentional orientation and the capacity for mindfulness. Second, it calls for an expanded form of media literacy, introduced here as MML, that equips individuals to recognize metaphors of mind embedded in media, understand their effects on attention, and engage alternative metaphors that better support mindfulness.

For researchers in media and communication, the EMM opens promising lines of inquiry. It invites a move beyond content analysis toward investigation of how media systems influence self-construal and mindfulness. It also lays groundwork for interdisciplinary collaboration with cognitive science, psychology, and anthropology, fields that increasingly recognize the role of environment in shaping cognition (Newen et al., 2018).

While this paper offers a broad conceptual reframing, its contribution is limited by its theoretical nature. The proposed relationships between media environments, metaphors of mind, self-construal, and mindfulness (see Figure 1) require empirical investigation. Future research should examine how specific media environments shape self-construal and mindfulness, whether these

dynamics vary across cultural contexts, and how MML practices might be effectively implemented and evaluated.

In summary, if mindfulness depends not only on individual practice but also on the environments in which attention is shaped, then media environments and the metaphors of mind they circulate deserve closer examination. Expanding media literacy to include awareness of these metaphors, and their associated effects on self-construal and attention, could allow scholars and practitioners to better understand how modern media influence the capacity for mindfulness, and how more supportive media environments could be designed.

### Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

### Author contributions

JM: Conceptualization, Writing – original draft, Writing – review & editing.

## Funding

The author(s) declared that financial support was not received for this work and/or its publication.

## Conflict of interest

The author(s) declared that this work was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## Generative AI statement

The author(s) declared that generative AI was used in the creation of this manuscript. Generative AI was used to refine wording for enhanced clarity and conciseness. Specifically,

ChatGPT-4o (OpenAI) was used to assist in rephrasing sentences and improving transitions. All ideas, structure, and conceptual development remain the original work of the author.

Any alternative text (alt text) provided alongside figures in this article has been generated by Frontiers with the support of artificial intelligence and reasonable efforts have been made to ensure accuracy, including review by the authors wherever possible. If you identify any issues, please contact us.

## Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

## References

- Brown, K. W., and Ryan, R. M. (2003). The benefits of being present: mindfulness and its role in psychological well-being. *J. Pers. Soc. Psychol.* 84:822. doi: 10.1037/0022-3514.84.4.822
- Brunton, R. (1989). The cultural instability of egalitarian societies. *Man* 24, 673–681. doi: 10.2307/2804294
- Calm (n.d.). *Is Your Brain at Capacity? Here's How to Offload Your Mental Load*. Available online at: <https://www.calm.com/blog/how-do-i-offload-my-mental-load> (Accessed April 20, 2025).
- Chan, K. T. (2022). Emergence of the 'digitalized self' in the age of digitalization. *Comput. Hum. Behav. Rep.* 6:100191. doi: 10.1016/j.chbr.2022.100191
- Cho, H., Cannon, J., Lopez, R., and Li, W. (2024). Social media literacy: a conceptual framework. *New Media Soc.* 26, 941–960. doi: 10.1177/14614448211068530
- D'Andrade, R. G. (1995). *The Development of Cognitive Anthropology*. Cambridge: Cambridge University Press. doi: 10.1017/CBO9781139166645
- Dumont, L. (1982). A modified view of our origins: the Christian beginnings of modern individualism. *Religion* 12, 1–27. doi: 10.1016/0048-721X(82)90013-6
- Entman, R. M. (1989). How the media affect what people think: an information processing approach. *J. Polit.* 51, 347–370. doi: 10.2307/2131346
- Everett, D. (2010). *Don't Sleep, There are Snakes: Life and Language in the Amazonian Jungle*. London: Profile Books.
- Firth, J., Torous, J., Stubbs, B., Firth, J. A., Steiner, G. Z., Smith, L., et al. (2019). The "online brain": how the Internet may be changing our cognition. *World Psychiatry* 18, 119–129. doi: 10.1002/wps.20617
- Forde, D., and Douglas, M. (1956). "Primitive economics," in *Man, Culture, and Society*, ed. H. L. Shapiro (Oxford: Oxford University Press), 330–344.
- Gibson, J. J. (1979). *The Ecological Approach to Visual Perception*. New York, NY: Psychology Press.
- Gill, C. (2009). "Ancient concepts of personal identity," in *The Oxford Handbook of Hellenic Studies*, eds. B. Graziosi, P. Vasunia, and G. Boys-Stones (Oxford: Oxford University Press), 260–270. doi: 10.1093/oxfordhb/9780199286140.013.0023
- Hayes, S. C., Strosahl, K. D., and Wilson, K. G. (1999). *Acceptance and Commitment Therapy*, Vol. 6. New York, NY: Guilford Press.
- Headspace (n.d.). *10 Ways Meditation Will Help You Stay Fit*. Available online at: <https://www.headspace.com/articles/ten-top-tips-for-getting-mind-fit> (Accessed April 20, 2025).
- Henrich, J. (2015). *The Secret of Our Success: How Culture is Driving Human Evolution, Domesticating Our Species, and Making Us Smarter*. Princeton, NJ: Princeton University Press. doi: 10.2307/j.ctvc77f0d
- Iyengar, S. S., and Lepper, M. R. (1999). Rethinking the value of choice: a cultural perspective on intrinsic motivation. *J. Pers. Soc. Psychol.* 76, 349–366. doi: 10.1037/0022-3514.76.3.349
- Jeong, S., Cho, H., and Hwang, Y. (2012). Media literacy interventions: a meta-analytic review. *J. Commun.* 67, 454–472. doi: 10.1111/j.1460-2466.2012.01643.x
- Keane, W. (2007). *Christian Moderns: Freedom and Fetish in the Mission Encounter*, Vol. 1. Oakland, CA: University of California Press.
- Kitayama, S., Snibbe, A. C., Markus, H. R., and Suzuki, T. (2004). Is there any "free" choice? Self and dissonance in two cultures. *Psychol. Sci.* 15, 527–533. doi: 10.1111/j.0956-7976.2004.00714.x
- Kozhevnikov, M., Evans, C., and Kosslyn, S. M. (2014). Cognitive style as environmentally sensitive individual differences in cognition: a modern synthesis and applications in education, business, and management. *Psychol. Sci. Public Interest* 15, 3–33. doi: 10.1177/1529100614525555
- Kuhfuß, M., Maldei, T., Hetmanek, A., and Baumann, N. (2021). Somatic experiencing-effectiveness and key factors of a body-oriented trauma therapy: a scoping literature review. *Eur. J. Psychotraumatol.* 12:1929023. doi: 10.1080/20008198.2021.1929023
- Lakoff, G., and Johnson, M. (1980a). *Metaphors We Live By*. Chicago, IL: University of Chicago Press.
- Lakoff, G., and Johnson, M. (1980b). The metaphorical structure of the human conceptual system. *Cogn. Sci.* 4, 195–208. doi: 10.1016/S0364-0213(80)80017-6
- Leenhardt, M. (1979). *Do Kamo*. Chicago, IL: University of Chicago Press. (Original work published 1947)
- Lillard, A. (1998). Ethnopsychologies: cultural variations in theories of mind. *Psychol. Bull.* 123, 3–32. doi: 10.1037/0033-2909.123.1.3
- Liu, C., Chen, H., Zhuo, J. W., and Chiou, W. K. (2023). Mindfulness in internet and new media. *Front. Psychol.* 14:1233809. doi: 10.3389/fpsyg.2023.1233809
- Luhrmann, T. M. (2021). "Mind," in *The Open Encyclopedia of Anthropology. Facsimile of the First Edition in the Cambridge Encyclopedia of Anthropology*, ed. F. Stein (Stanford, CA: Stanford University). doi: 10.29164/21mind
- Markus, H. R., and Kitayama, S. (1991). Culture and the self: implications for cognition, emotion, and motivation. *Psychol. Rev.* 98, 224–253. doi: 10.1037/0033-295X.98.2.224
- Martin, L. L. (1999). ID compensation theory: some implications of trying to satisfy immediate-return needs in a delayed-return culture. *Psychol. Inq.* 10, 195–208. doi: 10.1207/S15327965PLI1003\_1
- Martin, L. L., and Shirk, S. (2008). "Immediate return societies: what can they tell us about the self and social relationships in our society?" in *The Self and Social Relationships*, eds. J. Wood, A. Tesser, and J. G. Holmes (New York, NY: Psychology Press), 161–182.
- McAdam, E. (2024, July 11). The container method for processing trauma, PTSD and intense emotions. *Therapy in a Nutshell*. Available online at: <https://therapyinanutshell.com/container-method/> (Accessed April 20, 2025).
- Meaden, J. (2024). The environmental model of mindfulness. *Front. Soc. Psychol.* 2:1385819. doi: 10.3389/frsps.2024.1385819

- Mehl-Madrona, L., and Pennycook, G. (2009). Construction of an aboriginal theory of mind and mental health. *Anthropol. Conscious.* 20, 85–100. doi: 10.1111/j.1556-3537.2009.01017.x
- Myers, F. R. (1991). *Pintupi Country, Pintupi Self: Sentiment, Place, and Politics among Western Desert Aborigines*. Oakland, CA: University of California Press.
- Newen, A., De Bruin, L., and Gallagher, S. (eds.). (2018). *The Oxford Handbook of 4E Cognition*. Oxford: Oxford University Press. doi: 10.1093/oxfordhb/9780198735410.001.0001
- Page, B. I., Shapiro, R. Y., and Dempsey, G. R. (1987). What moves public opinion? *Am. Polit. Sci. Rev.* 81, 23–43. doi: 10.2307/1960777
- Petchkovsky, L. (2000). “Stream of consciousness” and “ownership of thought” in indigenous people in Central Australia. *J. Anal. Psychol.* 45, 577–597. doi: 10.1111/1465-5922.00195
- Powell, D. (2025). Mental health(ism) education and the neoliberal imaginary. *Sport Educ. Soc.* 1–14. doi: 10.1080/13573322.2025.2540067. [Epub ahead of print].
- Rout, M., and Reid, J. (2020). Embracing indigenous metaphors: a new/old way of thinking about sustainability. *Sustain. Sci.* 15, 945–954. doi: 10.1007/s11625-020-00783-0
- Salali, G. D., and Migliano, A. B. (2015). Future discounting in Congo Basin hunter-gatherers declines with socio-economic transitions. *PLoS ONE* 10:e0137806. doi: 10.1371/journal.pone.0137806
- Schutte, N. S., and Malouff, J. M. (2018). Mindfulness and connectedness to nature: a meta-analytic investigation. *Pers. Individ. Dif.* 127, 10–14. doi: 10.1016/j.paid.2018.01.034
- Shanmugasundaram, M., and Tamilarasu, A. (2023). The impact of digital technology, social media, and artificial intelligence on cognitive functions: a review. *Front. Cogn.* 2:1203077. doi: 10.3389/fcogn.2023.1203077
- Taylor, C. (1989). *Sources of the Self: The Making of the Modern Identity*. Cambridge, MA: Harvard University Press.
- Turnbull, C. M. (1965). *Wayward Servants: The Two Worlds of the African Pygmies*. New York, NY: Greenwood Press.
- Turnbull, C. M. (1983). *The Mbuti Pygmies: Change and Adaptation*. Austin, TX: Holt, Rinehart and Winston.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA: Harvard University Press.
- Whitbourne, S. K. (2017, May 13). 5 Reasons why clutter is bad for your mental health. *Psychology Today*. Available online at: <https://www.psychologytoday.com/us/blog/fulfillment-at-any-age/201705/5-reasons-why-clutter-is-bad-for-your-mental-health>? (Accessed April 20, 2025).
- Wilkes, K. V. (1988). *Real People: Personal Identity Without Thought Experiments*. Oxford: Clarendon Press.
- Woodburn, J. (1982). Egalitarian societies. *Man* 17, 431–451. doi: 10.2307/2801707