

Conceptualizations of Health Literacy: Past Developments, Current Trends, and Possible Ways Forward Toward Social Practice

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Undisputedly, the topic of health literacy has gained momentum and evolved within a fairly short period of time into a promising approach that can respond to major challenges resulting from the digital transformation for the management of health and health knowledge. Health literacy has, for instance, been critical to empowerment (World Health Organization, 1998) and has even been described to be a social determinant of health (World Health Organization, 2013). However, the portrayal of health literacy as a highly effective measure for addressing a wide range of health-related issues contrasts with the finding that its conceptual underpinnings are highly variable and sometimes inconsistent. It is, therefore, obvious to subject the current conceptualizations of health literacy to a critical review, as they shape our understanding about the topic and its further translation into methods, policies, or interventions. Such a call becomes even more emphatic given that the concept relates itself to potentials such as empowerment and health equity. At the same time, this approach uncovers gaps in research, thus providing input for future perspectives. Accordingly, this article aims to discern past development trajectories and current conceptualizations of health literacy, as well as to conclude with perspectives for future research on health literacy. The outline of perspectives is predicated on the premise that health literacy in its current form is not yet fully capable of realizing its self-imposed goals and that future research activities ben-

efit from a stronger consideration of insights from research related to literacy, agency, and health inequalities.

FIRST ANECDOTAL USES OF THE TERM “HEALTH LITERACY”

It has become part of the health literacy narrative to attribute the first appearance of the phrase “health literacy” to an article published in 1974 (Peerson & Saunders, 2009; Pleasant, 2013; Ratzan, 2001; Tones, 2002). In the article, “Health Education as Social Policy,” Simonds (1974) addresses the question about whether health education as a policy issue impacts health care systems, education systems, and mass communication (Okan, 2019). According to Tones (2002), Simonds argues a case for health education with the intention that students might become as literate in health as in other curricular topics. Thus, health literacy is seen as an outcome of health education meeting minimal standards for all grade levels (Ratzan, 2001). As Pleasant (2013) points out, the use was, by the author’s own report, more an accident of English than an intentional representation of a singular concept.

Irrespective of whether Simonds used the term “health literacy” intentionally or not, we were able to identify another source that challenges the established view as to the first use of the phrase. The article, “The Community Responsibility for Medical Care,” reveals that health literacy was used deliberately at a far earlier time than has been suggested (Dixon, 1959). Among other things, Dixon, who worked as

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a health commissioner at a Department of Public Health, tackles issues such as the responsibilities of public institutions for the delivery of equitable health care across all population groups, including in communities with various social, cultural, and economic needs. Dixon concludes the article with several trends that are likely to have a significant impact on the further direction of the discussions about the role of public agency for health care. These involve an increasing awareness of underserved groups, the equitable availability of public health services, and the insurance against population-wide disasters and epidemics. Furthermore, references are made regarding the importance of individual responsibility, the growth of voluntary insurance, and an overall increase of health literacy. The way in which health literacy is embedded in the Dixon (1959) article promotes self-responsibility for health care. Even though both the Simonds (1974) and Dixon (1959) articles indicate the connectivity of public health and education and stress the importance of additional “health literacy” work, nothing further was initiated on the topic in that period.

HEALTH LITERACY TRAJECTORIES FROM THE PAST TO THE PRESENT

A screening of the literature indicates that health literacy research has intensified since the turn of the millennium, and it is driven by different scientific disciplines. The increase in health literacy dialogue and research is well documented in PubMed and in bibliographic databases on education, library and information sciences, nursing, pharmacy, communication, and sociology (Bankson, 2009).

In addition, a retrospective view reveals that health literacy has been addressed at different times with a different emphasis and by use of different conceptual approaches. Okan (2019) suggests that past research on health literacy has been shaped by four major streams, which were guided by specific goals and approaches: (1) a learning outcome in school-based health education for children; (2) a literacy teaching tool and basic education program for adult learners; (3) a target dimension for the analysis of physician-patient interactions in clinical care; and (4) a health promotion paradigm in public health for decision-making processes. Given the proximity of health literacy to language and education, it is important to point out that the development of the health literacy field has been largely shaped by stimuli that have emerged mainly in the domains of health care and public health.

The multidisciplinary uptake of health literacy suggests that the subject has been appealing in different manifestations for a wide range of purposes and adaptable to different

theoretical references. It also points to the need for researchers to seek information about health literacy in a wider range of sources and to familiarize with different vocabularies and concepts.

CURRENT CONCEPTUALIZATIONS OF HEALTH LITERACY

The question of which conceptions of health literacy are currently given preferential consideration in the research discourse can be approached quite accurately with a series of systematic reviews of literature in which definitions, models and measurement methods of health literacy underwent analysis. This collection of articles helps to identify commonalities and differences between the conceptual approaches, and to figure out dominant notions of health literacy.

The understanding of health literacy in the European region has been framed by the results of a systematic review presented by the European Health Literacy Project (EU-HLS). Based on a content analysis of 17 definitions, this study developed a new and integrated definition that has become a major reference in the field of health literacy (Sørensen et al., 2012). According to the EU-HLS definition, health literacy “is linked to literacy and entails people’s knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course” (Sørensen et al., 2012, p 3).

Another systematic review that focused on articles published between 2007 and 2013 and indexed in MEDLINE found 250 different definitions of health literacy and identified six definitions as the most used (Malloy-Weir et al., 2016). Unlike the review of the EU-HLS group that aimed to harmonize the range of definitions, this study focused on (1) commonalities and the differences between the definitions and (2) the wording and the assumptions underlying the most used definitions. The review highlights that “each of the most commonly used definitions treated a person’s abilities (or skills) as central to the concept of health literacy” (Malloy-Weir, et al. 2016, p. 338). Differences between the definitions were reported as the “number and types of abilities (or skills) and/or actions believed to comprise health literacy” (Malloy-Weir, et al. 2016, p. 338). The analysis of the wording and the underlying assumptions revealed that the definitions are open to multiple interpretations and incorporate assumptions that are not always justifiable. For example, the authors articulate concerns that the definitions suggest a linear relationship between health information and the

promotion of health or that the definitions imply that the ability to use health information has an unmediated effect on the decision-making processes. They substantiate their concerns with personal values and beliefs, life contexts, and social structures that are known to be relevant determinants of health or health decision-making but are disregarded by the most commonly used definitions. Even though the authors acknowledge that the importance of social aspects beyond the individual is recognized in the current discourse on health literacy, they put it into perspective by pointing out that the wording of the definitions tends to promote more individualistic ideas.

Both systematic reviews considered here show that health literacy is currently embodied by a set of personal skills to carry out complex activities revolving around health information with determined results, such as rationale decision-making or health promotion. The studies also highlight that these features are susceptible and, therefore, in a position to respond to some critical considerations. The representation of health literacy by skills has also been questioned by Reeve and Basalik (2014). The authors evaluated the conceptual and empirical distinctiveness of the conception of health literacy as a set of domain-specific abilities and did not find any evidence of a health literacy factor in their analysis. Consequently, they question the uniqueness of a health literacy construct, argue in favor of construct redundancy and construct proliferation, and conclude that measures of health literacy rather reflect domain-specific contextualized measures of basic cognitive abilities (Reeve & Basalik, 2014). Therefore, further considerations on the future development and configuration of the health literacy concept are called for to take up and review the identified shortcomings and, if necessary, to respond with adjustments.

POSSIBLE WAYS FORWARD: ADDRESSING THE LITERACY IN HEALTH LITERACY

Health literacy is a combination of two major topics—health and literacy—each having an individual research tradition of its own. Therefore, the conceptualization of health literacy can draw on ideas that are fundamental to each topic and should be able to inform how health and literacy are related. Given that “health literacy is linked to literacy” (Sørensen et al., 2012), it seems promising to explore major research findings related to the topic of literacy and to juxtapose key perspectives of literacy and health literacy.

Research on literacy focuses on activities revolving around reading, writing, and calculating and seeks to gain an understanding of the factors that determine the acquisition and use of the written language. Literacy varies in its

meaning, depending on the purpose: as a set of functional skills, helping people to meet demands made by the society on them, or as a civilizing tool, allowing people to access a literary culture, or as a means of emancipation, enabling people to control their lives and become autonomous citizens in a democracy (Hamilton, 2010). Ideas of literacy have been guided by a broad range of theoretical perspectives that have evolved over time and informed the teaching of literacy. Current approaches to literacy are mainly guided by cognitive and sociocultural perspectives (Gaffney & Anderson, 2000; Kennedy et al., 2012).

Cognitive perspectives of literacy are primarily interested in mental processes that take place when words, structures, and the grammar of a text are recognized, and information or meaning are retrieved from a text, processed during the reading process, and stored in the memory for future retrieval (Lyytinen, 1985). A cognitive theory of reading development can be exemplified by Chall (1983) who postulated that all people progress through stages of reading acquisition in characteristic ways, in certain age limits, and following the same sequence. Based on this, Chall developed stages of reading and recommended norm-referenced tests to diagnose a reading problem. From a cognitive perspective, acting is determined by mental processes rather than by external conditions or stimuli. Development is seen as an active process of a person who is equipped with cognitive functions such as recognition and awareness.

Critical literacy theory positions have questioned such views by arguing that a focus on cognitive processes implies that people outside prescribed stages or standard norms are deficient in their literacy skills (Davidson, 2010). Tracey and Morrow (2006) indicate that an adherence to cognitive views systematically disadvantages children who are underserved and have inadequate access to education. Cognitive views of literacy are limited in understanding how people learn to read and write, and they fall short in considering the impact of social and cultural environments (Street, 1984).

Scholars endorsing literacy as a social practice aim to respond to the call for a sociocultural perspective in determining a person’s health literacy. Perspectives of literacy as a social practice are based on the idea that literacy is “what people do with reading, writing, and texts in real world contexts and why they do it” (Perry, 2012). Accordingly, literacy practices involve more than actions with texts because health literacy is shaped by values, attitudes, feelings, and social relationships. If reading and writing is a social practice, it implies that literacy is more than the acquisition of textual content (Street, 2005) and that texts do not have uses independent of the social meanings and purposes people con-

struct (Barton & Hamilton, 1998). Perspectives of literacy as a social practice, therefore, aim to describe how writing and reading are put into practice in everyday life based on the premise that this practice is not neutral, but dependent upon the context in which it takes place and embedded in social relationships as well power relations hidden in the nature of the context (Barton & Hamilton, 2000).

To study literacy as a social phenomenon, a framework is proposed that revolves around two interrelated ideas: literacy events and literacy practices (e.g., Barton & Hamilton, 2000). According to Street (1984), a literacy event is any occasion in which a piece of writing is integral to the nature of the participants' interactions and their interpretative processes. A literacy event serves as a specific instance of a literacy practice. The idea of literacy practices is broader and incorporates not only literacy events but also the ways people understand, feel, and talk about those events (Hamilton, 2010). Perry (2012) illustrates the distinction between literacy events and literacy practices by highlighting that literacy events are observable and allow for seeing what people do with texts, whereas literacy practices must be inferred because they connect to unobservable beliefs, values, attitudes, and social structures.

Current conceptualizations of health literacy show a proximity to cognitive perspectives of literacy, as both are characterized by a focus on skills and by the premise that personal skills are largely developed in a context-independent way. As outlined above, the research discourse on literacy has systematically responded to concerns about the neglect of the learning environments with perspectives of literacy as a social practice. Such an approach views literacy as something that people do within social environments and argues that literacy is sociocultural rather than a mental phenomenon that needs to be understood and studied in its full range of contexts. They address the impact of contexts and structures on the acquisition and performance of literacy and suggest that literacy is understood as a set of social practices rather than as a set of skills.

When one agrees that health literacy is linked to literacy, it is obvious to suggest that the conceptual work on health literacy should consider and systematically explore the relevance of sociocultural approaches to literacy for the health literacy construct. There are already some studies that refer to a sociocultural perspective and provide illuminating insights (Fairbrother et al., 2016; Parikh et al., 1996; Sentell et al., 2017), but a systematic analysis of the contributions that the main research paradigms of literacy can make to health literacy research is still pending.

If one further juxtaposes the dominant notions of health literacy and the perspectives of literacy that take a

sociocultural view, it becomes obvious to question whether the nature of health literacy is captured comprehensively by the current research discourse. A reference to skills has become central when defining health literacy. In this way, the perspective focuses more on the personal prerequisites for action than on the actual actions and, therefore, makes access to the investigation of social practices and structures more difficult. The bias toward skills and cognitive perspectives gives behavioral determinants priority over contextual factors, whose relevance for health and educational outcomes has largely been demonstrated in the past. Such a bias can lead to misinterpretations in both research and transfer (e.g., policies and programs). Following a sociocultural approach would call for shifting the focus from skills to the practices of health literacy. This would also have implications for the methodological approaches used within health literacy research, including alterations in the unit of observation. In line with the perspectives of literacy as a social practice, the study of health literacy could benefit from a framework that is shaped by the notion of events and practices. Accordingly, the unit of observation would shift from personal attributes of a person, which is the current mode in health literacy research, to health literacy events and practices in which a person is involved. A health literacy event can be defined as any occasion in which any form of print- or screen-based text that is used to transmit health-related content is integral to the nature of the participants' interactions and their interpretative processes. Analyzing health literacy in terms of literacy events illuminates literacy practices—defined as social practices that can be observed in a literacy event and that represent what people do when they are exposed to written language. The investigation of social practices provides information on the person's skills and knowledge as well as insights into beliefs, dispositions, values, attitudes, feelings, and social relationships. Beyond the analysis of personal attributes, using health literacy events and practices as an analytical framework also allows us to address the attributes of the texts (e.g., form, content, and evidence) and the social and cultural attributes of the context in which the interaction takes place. Research into health literacy along these lines also calls for the collection of data to draw on a methodological repertoire that is distinct from what has been commonly used. The conventional way of collecting data on health literacy has mainly drawn on quantitative methods (e.g., questionnaires) to meet goals such as measurability and comparability. In contrast, a method of data collection that follows a theoretical perspective aiming at the representation of health literacy in use, makes greater use of the rich repertoire from qualitative research (e.g., interviews, focus groups, ethnogra-

phy) in which observation and non-numerical information become the main sources of information. Understanding health literacy as a situated and socially embedded practice integrates the analysis of people's agency into the study of the social structures and their impact on the event. Shifting the view from skills, which reflect the readiness to use health information, to the actual act of reading or writing health information (in which skills become manifest) broadens the scope of the analysis to the extent that it acknowledges that health literacy is also determined by the specific time and place in which it takes place as well as by the interrelationships between people and their social environments.

REFERENCES

- Bankson, H. L. (2009). Health literacy: An exploratory bibliometric analysis, 1997-2007. *Journal of the Medical Library Association: JMLA*, 97(2), 148-150. <https://doi.org/10.3163/1536-5050.97.2.016> PMID:19404510
- Barton, D., & Hamilton, M. (1998). *Local literacies: Reading and writing in one community*. Routledge.
- Barton, D., & Hamilton, M. (2000). Literacy practices. In D. Barton, M. Hamilton, & R. Ivanič (Eds.), *Situated literacies: Reading and writing in context* (pp. 7-15). Routledge.
- Chall, J. S. (1983). *Stages of reading development*. Harcourt Brace.
- Davidson, K. (2010). The integration of cognitive and sociocultural theories of literacy development: Why? How? *The Alberta Journal of Educational Research*, 56(3), 246-256.
- Dixon, J. P. (1959). The community responsibility for medical care. *American Journal of Public Health and the Nation's Health*, 49(1), 76-81. <https://doi.org/10.2105/AJPH.49.1.76> PMID:13617537
- Fairbrother, H., Curtis, P., & Goyder, E. (2016). Making health information meaningful: Children's health literacy practices. *SSM - Population Health*, 2, 476-484. <https://doi.org/10.1016/j.ssmph.2016.06.005> PMID:29349163
- Gaffney, J. S., & Anderson, R. C. (2000). Trends in reading research in the United States: Changing intellectual currents over three decades. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of reading research* (Vol. III, pp. 53-74). Erlbaum.
- Hamilton, M. (2010). The social context of literacy. In N. Hughes & I. Schwab (Eds.), *Teaching adult literacy: Principles and practice* (pp. 7-27). McGraw-Hill Education.
- Kennedy, E., Dunphy, E., Dwyer, B., Hayes, G., McPhillips, T., Marsh, J., O'Connor, M., & Shiel, G. (2012). *Literacy in early childhood and primary education (3-8 years)*. https://ncca.ie/media/2137/literacy_in_early_childhood_and_primary_education_3-8_years.pdf
- Lyytinen, K. J. (1985). Implications of theories of language for information systems. *Management Information Systems Quarterly*, 9(1), 61-74. <https://doi.org/10.2307/249274>
- Malloy-Weir, L. J., Charles, C., Gafni, A., & Entwistle, V. (2016). A review of health literacy: Definitions, interpretations, and implications for policy initiatives. *Journal of Public Health Policy*, 37(3), 334-352. <https://doi.org/10.1057/jphp.2016.18> PMID:27193502
- Okan, O. (2019). From Saranac Lake to Shanghai: A brief history of health literacy. In O. Okan, U. Bauer, D. Levin-Zamir, P. Pinheiro, & K. Sørensen (Eds.), *International handbook of health literacy* (pp. 21-39). Policy Press.
- Parikh, N. S., Parker, R. M., Nurss, J. R., Baker, D. W., & Williams, M. V. (1996). Shame and health literacy: The unspoken connection. *Patient Education and Counseling*, 27(1), 33-39. [https://doi.org/10.1016/0738-3991\(95\)00787-3](https://doi.org/10.1016/0738-3991(95)00787-3) PMID:8788747
- Peerson, A., & Saunders, M. (2009). Health literacy revisited: What do we mean and why does it matter? *Health Promotion International*, 24(3), 285-296. <https://doi.org/10.1093/heapro/dap014> PMID:19372101
- Perry, K. H. (2012). What is literacy? A critical overview of sociocultural perspectives. *Journal of Language & Literacy Education*, 8(1), 50-71.
- Pleasant, A. (2013). Health literacy: A brief synopsis of the field. In: IOM Institute of Medicine (Ed.), *Health literacy: Improving health, health systems, and health policy around the world: Workshop summary* (pp. 102-104). The National Academies Press.
- Ratzan, S. C. (2001). Health literacy: Communication for the public good. *Health Promotion International*, 16(2), 207-214. <https://doi.org/10.1093/heapro/16.2.207> PMID:11356759
- Reeve, C. L., & Basalik, D. (2014). Is health literacy an example of construct proliferation? A conceptual and empirical evaluation of its redundancy with general cognitive ability. *Intelligence*, 44, 93-102. <https://doi.org/10.1016/j.intell.2014.03.004>
- Sentell, T., Pitt, R., & Buchthal, O. V. (2017). Health literacy in a social context: Review of quantitative evidence. *HLRP: Health Literacy Research and Practice*, 1(2), e41-e70. <https://doi.org/10.3928/24748307-20170427-01> PMID:31294251
- Simonds, S. K. (1974). Health education as social policy. *Health Education Monographs*, 2(Suppl. 1), 1-10. <https://doi.org/10.1177/10901981740020S102> PMID:11650649
- Sørensen, K., Van den Broucke, S., Fullam, J., Doyle, G., Pelikan, J., Slon-ska, Z., Brand, H., & the (HLS-EU) Consortium Health Literacy Project European. (2012). Health literacy and public health: A systematic review and integration of definitions and models. *BMC Public Health*, 12(80), 1-13. <https://doi.org/10.1186/1471-2458-12-80> PMID:22276600
- Street, B. (1984). *Literacy in theory and practice*. Cambridge University Press.
- Street, B. (2005). At last: Recent applications of new literacy studies in educational contexts. *Research in the Teaching of English*, 39(4), 417-423.
- Tones, K. (2002). Health literacy: New wine in old bottles? *Health Education Research*, 17(3), 287-290. <https://doi.org/10.1093/her/17.3.287> PMID:12120844
- Tracey, D. H., & Morrow, L. M. (2006). *Lenses on reading*. Guilford Press.
- World Health Organization. (1998). *Health promotion glossary*. <https://www.who.int/healthpromotion/about/HPG/en/>
- World Health Organization. (2013). *Health literacy. The solid facts*. <https://apps.who.int/iris/bitstream/handle/10665/128703/e96854.pdf>