Water Economics and Policy, Vol. 8, No. 2 (2022) 2250007 (21 pages)

DOI: 10.1142/S2382624X22500072

World Scientific
www.worldscientific.com

A Conceptual Model to Assess the Literacy of Water Consumers

Ana Fernandes*, Margarida Figueiredo†, José Neves‡,§ and Henrique Vicente§,¶,‖

*CBIOS, Escola de Ciências e Tecnologias da Saúde
Universidade Lusófona
Campo Grande 376, 1749-024 Lisboa, Portugal

†Departamento de Química e Bioquímica
Escola de Ciências e Tecnologia
Centro de Investigação em Educação e Psicologia, Universidade de Évora
Rua Romão Ramalho, 59, 7000-671 Évora, Portugal

‡Instituto Universitário de Ciências da Saúde, CESPU
Rua José António Vidal, 81, 4760-409 Famalicão, Portugal

§Centro Algoritmi, Universidade do Minho
Campus de Gualtar, Rua da Universidade, 4710-057 Braga, Portugal

¶Departamento de Química e Bioquímica
Escola de Ciências e Tecnologia
REQUIMTE/LAQV, Universidade de Évora
Rua Romão Ramalho, 59, 7000-671 Évora, Portugal
‖hvicente@uevora.pt

Received 13 August 2021
Revised 1 March 2022
Accepted 14 March 2022
Published 5 May 2022

A conceptual model to assess the literacy level of water consumers is presented. On the one hand, a literature search was performed using the *ScienceDirect* and *B-On* platforms, conjoining the terms *literacy*, *awareness*, *water*, *water for human consumption*, *drinking water*, *environmental*, *disease prevention and public health*, resulting in seven papers with the mingle of literacy and water and five on literacy and the environment being uncovered. On the other hand, the lack of papers and information on the subject caused us to consider developing a conceptual model to transform the processes of planning and operationalization of the studies of literacy of water consumers. The model can support the development and validation of measurement tools capable of apprehending different

‖Corresponding author.

dimensions in the context of water literacy. A questionnaire was conceived and applied to a cohort of 147 respondents in order to assess water literacy. In addition, the articulation of the proposed model and Deming's PDCA model was demonstrated in order to achieve excellence through the evaluation of the current reality to promote improvement solutions.

Keywords: Conceptual model; disease prevention; public health; water literacy; water quality.