AQUADEMIA
2024, 8(2), ep24005
ISSN 2542-4874 (Online)
https://www.aquademia-journal.com/

Editorial

OPEN ACCESS

Seeing the unseen: The critical need for water awareness and perception

Olcay Sinan [1*]

[1] The University of Texas at Austin, USA
***Corresponding Author:** olcaysinan@utexas.edu

Citation: Sinan, O. (2024). Seeing the unseen: The critical need for water awareness and perception. *Aquademia, 8*(2), ep24005. https://doi.org/10.30935/aquademia/14861

INTRODUCTION

Water is life and a resource which, in theory, appears inexhaustible, since it covers our planet with a cloak, but which is in fact rather limited and rapidly vanishing. Water is one of the reality aspects in contemporary society that is underestimated by the public. We switch the tap and expect to get a clear stream of water for drinking and many a times we do not even bother to contemplate the whole process that went into getting that water.

THE IMPORTANCE OF WATER AWARENESS

The objective of this editorial is to help us look beyond the water and realize that a simple substance is a necessity of life. It will elaborate inequity in water consciousness; threats to world water stability; and individual and social call to action to shift towards local water management and mitigation. Suppose the world has reached a level where every single drop of water is balanced with an equivalent drop of water. This may sound like something from a movie; however, it is millions of people's daily life in arid countries. It is worrying to note the difference in such awareness today: In Asia alone, the awareness of 46 percent of the population regarding the availability of water is grossly inadequate. In the developed countries where piped water is always available the conservation ventures are rarely seen. Research shows that people tend to consider only the taste and smell of the water and do not acknowledge the complex processes involved in the purification and the negative influences, which are pollution for instance (Webber et al., 2015). This limited perception can be translated into wastage of water. Loose taps, too much showering, and basically ignorance about water washing and other activities like washing cars affect the situation. Besides, people have various misconceptions about water sources also. Global warming is making glaciers, which are conventionally considered to be virtually inexhaustible sources, melt at a very fast pace as stated by Rajak (2021).

FACTORS INFLUENCING WATER AWARENESS AND PERCEPTION

Water awareness includes cognitive, affectional, and behavioral dimensions associated with knowledge of the quality, quantity, and system of tap water (Madias et al., 2022). It is the awareness of the fact about water pollution, its causes, and the probable consequences that can in turn affect an individual's actions and choices when it comes to recreational activities or water intake, according to Brouwer et al. (2021). The perceived knowledge about the usage of personal water also affects the intention of adopting smart meters for water giving correct details about the consumption of water. The need to understand the usage of water as a resource is more for the sustainable use of the resource (Ross et al., 2020). Furthermore, risk perception of water professionals is an important factor in project decision making process in case of water projects. Social risks such as opposition to communities and organizational image are some of the prominent factors affecting the feasibility of the project (Okumah et al., 2018). Knowledge of water awareness and perception is important about enhancing the future water management behavior among the population.

PERCEPTION OF WATER SCARCITY

The attitudes and beliefs of population concerning the lack of water availability and its effect on people's lives are conditioned by several factors. Thus, studies show that the consumption of discretionary foods affects water-scarcity impacts based on distinguishing between healthy and poor-quality diets according to Ridoutt et al. (2019). Besides, powerful hydro-social imaginaries alter the water flows that cause the construction of territorialized water scarcity hence

an impact on the health of the people in the region hence chronic stress, social isolation, and other health complications (Ženko & Menga, 2019). Water scarcity perceptions and intervention measures differ from country to country: developed countries' inhabitants are worried about water quality and right actions, whereas inhabitants of water-deficient nations are concerned about collective policy and technology (Larson et al., 2016). Furthermore, managing with the unpredictability of supply can affect subjective well-being positively through the provision of long-term water conservation efforts, thus, saving more time on water sourcing and improving evaluative subjective well-being (Chindarkar et al., 2018). Last but not least, a psychosocial factor such as subjective happiness and personal well-being also affects people's' water conservation intentions considering that mental health plays an important role in the process (Aslam et al., 2021).

CONCLUSION

Water can be referred to as the fundamentals of life and thus part of the sustainable development. What you see and what actually is must match or be brought closer together. Therefore, enhancing water consciousness, performing correct conducts, and mobilizing everyone's participation, it becomes possible to alter the current status and ensure people the water assurance with the next generations. It stands only rationale that people should have started to understand the fact that things such as water is not as basic as it appears and it an adequate treasure of nature on its own.

The current perception people have over water as an abundant resource that will never run out is one of the biggest fallacies. Indeed, globally, the supply of freshwater seems sufficient; however, the freshwater that people use for drinking and agricultural needs is limited and under stress. It alters precipitation distribution; it increases drought occurrences in the arid regions while at the same time increases sea level causing salinization of the coastal freshwater sources. Population growth also exerts a lot of stress on any available water sources that may be around. The existing trend is very unhealthy, and a drastic change is required for the future.

This change needs to be achieved through a complex that deals with water problems at their sources and encourages the efficient usage of water resources. Every day, water resources are wasted due to leakage in water pipes, inefficient irrigation systems and several others; hence, any investment on the water infrastructure guarantees a saving on water usage. Encouraging the use of water-saving equipment such as washing machines, showers, and in industries will help save a lot. Moreover, awareness creation in the areas of water provision together with the promotion of water use efficiency education campaigns and community-based water use programming initiatives are imperative. Therefore, when one is equipped with knowledge of the issues and made part of solving the problems, it becomes easier to build a water secure world. Last but not the least; water security is one and for all a matter of environmental, social, and economic sustainability in the contemporary world. Lack of water can cause an increase in poverty levels, may lead to conflict as well as slow development of economies. On the other hand, through effective investment in water management we would be able to open new employment opportunities for the populace, build capacity to intervene with the problems and therefore initiate development for everyone.

REFERENCES

Aslam, S., Aftab, H., Martins, J. M., Mata, M. N., Qureshi, H. A., Adriano, A. M., & Mata, P. N. (2021). Sustainable model: Recommendations for water conservation strategies in a developing country through a psychosocial wellness program. *Water*, *13*(14), 1984. https://doi.org/10.3390/w13141984

Brouwer, S., Van Aalderen, N., & Koop, S. H. A. (2021). Assessing tap water awareness: The development of an empirically-based framework. *PloS One*, *16*(10), e0259233. https://doi.org/10.1371/journal.pone.0259233

Chindarkar, N., Chen, Y. J., & Gurung, Y. (2018). Subjective well-being effects of coping cost: Evidence from household water supply in Kathmandu Valley, Nepal. *Journal of Happiness Studies*, *20*(8), 2581–2608. https://doi.org/10.1007/s10902-018-0060-6

Larson, K. L., Stotts, R., Wutich, A., Brewis, A., & White, D. (2016). Cross-Cultural perceptions of water risks and solutions across select sites. *Society & Natural Resources*, *29*(9), 1049-1064. https://doi.org/10.1080/08941920.2015.1122132

Madias, K., Borusiak, B., & Szymkowiak, A. (2022). The role of knowledge about water consumption in the context of intentions to use IoT water metrics. *Frontiers in Environmental Science*, *10*. https://doi.org/10.3389/fenvs.2022.934965

Okumah, M., Chapman, P., Martin-Ortega, J., & Novo, P. (2018). Mitigating agricultural diffuse pollution: Uncovering the evidence base of the awareness–behaviour–water quality pathway. *Water*, *11*(1), 29. https://doi.org/10.3390/w11010029

Rajak, J. (2021). A preliminary review on impact of climate change and our environment with reference to global warming. *International Journal of Environmental Sci*ences, *10*, 11-14.

Ridoutt, B. G., Baird, D., Anastasiou, K., & Hendrie, G. A. (2019). Diet quality and water scarcity: evidence from a large Australian population health survey. *Nutrients, 11*(8), 1846. https://doi.org/10.3390/nu11081846

Ross, A. D., Hotard, A., Kamalanathan, M., Nolen, R., Hala, D., Clay, L. A., Kaiser, K., & Quigg, A. (2020). Awareness is not enough: Frequent use of water pollution information and changes to risky behavior. *Sustainability*, *12*(20), 8695. https://doi.org/10.3390/su12208695

Webber, M. A., Atherton, P., & Newcombe, G. (2015). Taste and odour and public perceptions: What do our customers really think about their drinking water? *Journal of Water Supply: Research and Technology—AQUA*, *64*(7), 802-811.

Ženko, M., & Menga, F. (2019). Linking water scarcity to mental health: Hydro–social interruptions in the Lake Urmia Basin, Iran. *Water*, *11*(5), 1092. https://doi.org/10.3390/w11051092