## 6.5.2 Water features

The integration of water features into healing environments—such as hospitals, rehabilitation centres, spas, and meditation gardens—has been shown to enhance psychological and physiological well-being. They also look aesthetically pleasing. The presence of water, whether in the form of fountains, streams, ponds, or even artificial waterfalls, contributes to stress reduction, improved mood, and faster recovery times. Realistically, we are more likely to have smaller portable water features in our healing environments, if we have any.

### 6.5.2.1. Historical context and traditional uses of water

Water has long been associated with tranquillity, renewal and healing across various cultures and historical periods. Ancient civilizations, including the Greeks and Romans, built elaborate baths and hydrotherapy centres to promote cleanliness, health and relaxation[1]. Not many such structures still survive, but the Roman bathhouse in Bath, England, up to the top of the pillars is still original. [2]

In traditional Chinese medicine and Japanese garden design, water symbolizes life, renewal and balance, contributing to a sense of harmony[3].

Kenrokuen garden in Kanazawa, Japan

For those who use the tarot, the suit of cups relates to the element of water and our emotions. Although the tarot decks date back to 15th century Europe, they were used for games and the symbolism wasn't added until the Renaissance era. As you read about the psychologic benefits of water, you will understand why their intuitive connection to our emotions is appropriate.

More recently, the ancient Chinese practice of feng shui, sometimes called Chinese geomancy, was introduced into Western culture. The water element is one of the five foundational elements in feng shui practice, along with fire, wood, earth, and metal. Though the presence of all elements is important, the water element is vital because water represents

[1] Ulrich, R. S. (1999). "Effects of gardens on health outcomes: Theory and research" *Healing gardens: Therapeutic benefits and design recommendations* pp. 27-86. Wiley

[2] Bathhouse picture by Diego Delso, delso.photo, License CC BY-SA

[3] Kaplan, R., & Kaplan, S. (1989) *The experience of nature: A psychological perspective,* Cambridge University Press

 

the flow of energy. The flow of energy, or “chi,” is thought to be crucial for creating a harmonious and well-balanced environment. Therefore, the water element is considered necessary to get this balance right in order to promote prosperity, tranquillity, and abundance[4].

Modern healthcare architecture has also revisited these ancient principles, incorporating water features to create restorative environments. The concept of "healing gardens" in hospitals, for example, often includes water elements to foster tranquillity and aid patient recovery[5].

### *6.5.2.2. Psychological benefits of water features*

- **Stress reduction and relaxation** The sound of flowing water has been shown to activate the parasympathetic nervous system, promoting relaxation and reducing anxiety[6]. The presence of water in natural and built environments has been linked to lower heart rates and improved emotional states.[7] Other studies have found similar results. The sound and sight of flowing water have been found to lower cortisol levels, a key stress hormone[8]. Another study demonstrated that natural sounds, including water, significantly reduced stress more effectively than silence or urban noise[9]. The rhythmic, predictable nature of water movement induces a meditative state, promoting relaxation. [10]

- **Improved mood and emotions** Research suggests that people prefer environments with water elements, as they evoke feelings of peace and contentment.[11] The biophilia hypothesis, proposed by Edward O. Wilson[12], theorises that humans have an innate

[4] Rachel Brown, **(**Feb 22, 2023) “The Water Element: How to Use it in Feng Shui Design”, Homeedit, from www.homedit.com/feng-shui/elements/water/ .
[5] Cooper Marcus, C., & Barnes, M. (1999) *Healing gardens: Therapeutic benefits and design recommendations,* Wiley.
[6] Tang, HF., Lee, AY. & Hung, SH. (2024) “Does built environment and natural leisure settings with bodies of water improve human psychological and physiological health?”, *Landscape Ecol Eng* 20, pp.547–558.
[7] ibid.
[8] Ulrich, R. S., et al. (1991) "Stress recovery during exposure to natural and urban environments." *Journal of Environmental Psychology, 11*(3), pp.201-230.
[9] Alvarsson, J. J., Wiens, S., & Nilsson, M. E. (2010) "Stress recovery during exposure to nature sound and environmental noise." *International Journal of Environmental Research and Public Health, 7*(3), pp.1036-1046
[10] Image from amazon.com
[11] Zhang, X., Zhang, Y., Zhai, J., Wu, Y., & Mao, A. (2021) “Waterscapes for Promoting Mental Health in the General Population”, *International Journal of Environmental Research and Public Health*, *18*(22), 11792.
[12] Wilson, E. O. (1984) *Biophilia*, Harvard University Press.

 

connection to nature and it supports the idea that water features enhance psychological well-being[13]. “Wellbeing Exposure” (walking in nature or viewing pictures of nature) to water features has been linked to increased serotonin and dopamine production, neurotransmitters associated with happiness and relaxation[14]. Patients in hospitals with access to water features report lower levels of anxiety and depression[15].

- **Enhanced focus and cognitive restoration** The presence of water features can invigorate the mind, enhancing focus and clarity. The gentle sounds can mask distracting noises, creating an environment conducive to concentration and cognitive performance. According to Attention Restoration Theory (ART)[16], natural elements like water help restore mental fatigue by providing a "soft fascination" that allows the brain to recover from overstimulation. Water features in healthcare settings can improve patient focus and reduce mental exhaustion.

[17]

### *6.5.2.3. Physiological benefits of water features*

- **Lowered blood pressure and heart rate** Studies indicate that exposure to water features can lead to measurable reductions in blood pressure and heart rate[18]. The calming effect of water sounds and visuals can reduce physiological stress responses, contributing to overall cardiovascular health[19]. This effect is particularly beneficial in cardiac rehabilitation units where stress reduction is critical.
- **Pain management** Some studies suggest that water therapy, including hydrotherapy and exposure to water features, can aid in pain management. The soothing effects

[13] Ibid.

[14] Berman, M. G., Jonides, J., & Kaplan, S. (2008) "The cognitive benefits of interacting with nature." *Psychological Science, 19*(12), pp.1207-1212.

[15] Diette, G. B., et al. (2003) "Distraction therapy with nature sights and sounds reduces pain during flexible bronchoscopy." *Chest, 123*(3), pp.941-948.

[16] Kaplan, S. (1995) "The restorative benefits of nature: Toward an integrative framework." *Journal of Environmental Psychology,* 15(3), pp.169-182.

[17] Photo by Muneer ahmed ok on Unsplash.

[18] Parsons, R., Tassinary, L. G., Ulrich, R. S., Hebl, M. R., & Grossman-Alexander, M. (1998) "The view from the road: Implications for stress recovery and immunization." *Journal of Environmental Psychology*, 18(2), pp.113-140.

[19] Tang, HF., Lee, AY. & Hung, SH. (2024), as above.

 

of water can help alleviate discomfort and promote relaxation[20]. Research found that post-surgical patients with views of nature (including water) required fewer pain medications and had shorter hospital stays than those without such views[21]. The calming effect of water may enhance pain tolerance by reducing perceived discomfort.

- **Respiratory benefits** Water features can improve air quality by increasing humidity and reducing airborne pollutants[22]. This can be particularly beneficial in healthcare settings, as the World Health Organization (WHO) highlights the importance of humidity control to reduce airborne pathogens and improve patient recovery.
- **Improved sleep quality** The white noise generated by water features can mask disruptive sounds in healthcare environments, promoting better sleep—a crucial factor in patient recovery[23]. If they can mask hospital sounds, I'm guessing they can mask disruptive sounds in our healing environments too.

#### *6.5.2.4. Biophilic design and water features*

Water has become a design feature in some environments. Biophilic design integrates natural elements into built environments and emphasizes the importance things such as water features in promoting human well-being[24]. Key water principles include:

- **Visual and auditory connection to water** Even artificial water features can mimic natural movement and flow of natural water systems, providing sensory benefits.
- **Dynamic and diffuse light reflections** The play of light on water surfaces enhances visual interest and relaxation.


[25]

[20] Tang, HF., Lee, AY. & Hung, SH. (2024), as above.
[21] Ulrich, R. S. (1984) "View through a window may influence recovery from surgery" *Science, 224*(4647), pp.420-421.
[22] Mason, K. (2007) "Clean water, clean air", *Healthcare Design Magazine* from https://healthcaredesignmagazine.com/news/clean-water-clean-air/442/ .
[23] Mazer, S. E. (2012) "Creating a Culture of Safety: Reducing Hospital Noise." *Biomedical Instrumentation & Technology*, 46(5), pp.350–355.
[24] Kellert, S. R., Heerwagen, J., & Mador, M. (2008) *Biophilic design: The theory, science, and practice of bringing buildings to life,* Wiley.
[25] Image from amazon.com

 

- **Thermal and humidity regulation** Indoor water features can improve air quality and humidity, benefiting respiratory health.

#### 6.5.2.5. *Practical applications in healing environments*

- **Hospital gardens and atriums** Indoor fountains, aquariums, and outdoor ponds contribute to stress reduction and improved patient outcomes[26]. Hospitals such as the Maggie's Centres in the UK incorporate water features to create serene environments for cancer patients[27]. Studies show that patients in these settings experience faster recovery rates.

- **Wellness centres and spas** Water features are a common in wellness centres and spas, enhancing relaxation and promoting holistic healing. The combination of water sounds, visual aesthetics, and therapeutic properties contributes to a restorative experience[28].

- **Rehabilitation centres** Water features in physical therapy areas can reduce patient anxiety, making rehabilitation exercises more tolerable[29].

- **Mental health facilities** Therapeutic landscapes with water elements have been shown to reduce agitation in dementia patients and improve emotional regulation in psychiatric care[30]. [31]

As spiritual healers, our clients probably won't have such focused requirements but the potential benefits will be the same.

#### 6.5.2.6. *Challenges and considerations*

While water features offer numerous benefits, the implementation of large features requires careful planning:

[26] Therapeutic Landscapes Network "Water" from https://healinglandscapes.org/resources/water/ .
[27] Jencks, C., & Heathcote, E. (2010) *The Architecture of Hope: Maggie's Cancer Caring Centres*. London: Frances Lincoln.
[28] Zhang, X., Zhang, Y., Zhai, J., Wu, Y., & Mao, A. (2021), as above.
[29] Sherman, S. A., Varni, J. W., Ulrich, R. S., & Malcarne, V. L. (2005) "Post-occupancy evaluation of healing gardens in a pediatric cancer center" *Landscape and Urban Planning*, *73*(2-3), pp.167-183.
[30] Detweiler, M. B., et al. (2012) "What is the evidence for the use of sensory gardens in dementia care?" *Journal of Alzheimer's Disease, 31*(4), pp.773-786.
[31] Image from amazon.com

 

- **Infection control** Stagnant water can harbour pathogens; thus, proper maintenance is essential.
- **Accessibility** Ensuring that water features are safely installed and maintained is crucial to prevent accidents, especially in environments with children or individuals with mobility challenges. Proper design and placement can mitigate potential hazards.
  Water features should also be designed and placed to accommodate use by patients with mobility issues as well as more able-bodied people.
- **Cost and maintenance** Sustainable designs (e.g., recirculating systems) are necessary to balance therapeutic benefits with environmental impact.

These problems aren't likely to be big issues for the smaller portable water features that we are more likely to be using in our healing environments, however the water should still be changed or cleared regularly.

### *6.5.2.7. Learning for spiritual healers*

Water features play a role in healing environments, offering psychological and physiological benefits that promote relaxation, mood enhancement, and cognitive function. Whether in hospitals, wellness centres, or our own healing environments, the presence of water can contribute to a peaceful and restorative atmosphere, with a similar effect to that of candles except water can also add a sound element to mask distractions. Together they represent two of the natural elements revered by many ancient cultures: water and fire.
[32]

However, water features do require some maintenance. Regular cleaning or water treatment is necessary to prevent the growth of algae and bacteria, ensuring the feature remains a healthy addition to your environment.

[32] Image from amazon.com

 