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WELLBEING BEYOND BORDERS: CROSS-CULTURAL INSIGHTS AND FOREST BATHING

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Abstract
As mental health concerns continue to rise globally, understanding how cultural context shapes recovery has become increasingly essential. This commentary builds on the themes of my upcoming keynote at Azerbaijan University, drawing from findings in cross-cultural mental health research, including the Global INSPIRE and RECOLLECT projects. Highlighting comparative studies from 28 countries, I advocate for culturally grounded, context-sensitive approaches to personal recovery. In addition, I explore the growing evidence for forest bathing (shinrin-yoku) as a nature-based intervention that offers accessible and cross-culturally adaptable support for wellbeing. Together, these insights underscore the importance of integrating both cultural nuance and universal human experiences - such as nature connection - into future mental health research and practice.

Keywords
Cross-cultural mental health, personal recovery, Global INSPIRE, forest bathing, nature-based therapy, wellbeing, UK-Japan research, cultural psychology.

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1. Introduction

Personal recovery in mental health refers to the process through which individuals develop new meaning and purpose in life, beyond the limitations imposed by mental illness (Slade, 2009). In contrast to clinical recovery, which emphasises symptom reduction and functional restoration, personal recovery focuses on maximising wellbeing, autonomy and quality of life. Today, personal recovery is embedded in the mental health policies of many countries (Slade & Longden, 2015). However, how this concept is understood, expressed and implemented may vary significantly across cultural contexts (Kotera *et al*., 2024; 2025). In this commentary, I share key findings from our cross-cultural research on personal recovery, alongside recent insights from forest bathing - an increasingly recognised nature-based intervention shown to offer mental health benefits across diverse cultures.

2. Cross-Cultural Dimensions of Mental Health Recovery

Our work on the Global INSPIRE project aimed to evaluate both the universality and cultural variability of mental health recovery processes (Kotera *et al*., 2025). We used

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the CHIME framework - Connectedness, Hope, Identity, Meaning and Empowerment (Leamy *et al*., 2011) - as a reference point to explore how individuals from different countries interpret and prioritise these dimensions of recovery.

For example, in a comparative study between the UK and Japan (Kotera *et al*., 2025), we found that UK participants prioritised Hope, Meaning and Empowerment, whereas Japanese participants placed greater emphasis on Identity. These differences reflect distinct cultural values underpinning personal recovery. The higher Identity scores in Japan may signify a shift from traditional collectivist norms towards more individualistic values. Historically, Japanese society has been characterised by Collectivism, where self-concept is closely shaped by social perception and group harmony (Kitayama *et al*., 2022). However, with growing cultural acceptance of Individualism in recent years, the importance of cultivating a positive personal identity has become increasingly recognised (Sugimoto, 2020). In contrast, the UK's higher scores in Hope, Meaning and Empowerment highlight a cultural orientation toward optimism, purpose and personal agency - all of which align with individualistic values that prioritise autonomy and self-direction (Kotera *et al*., 2024). These findings underscore the critical role of cultural context in shaping recovery and emphasise the need for culturally sensitive assessment and intervention (Ma-Kellams *et al*., 2011).

Moreover, our 28-country study revealed that the current operational models of Recovery Colleges (RCs) are influenced by cultural characteristics (Kotera *et al*., 2024). Specifically, Individualism (prioritising personal needs), Indulgence (orientation toward enjoyment), Uncertainty Acceptance (openness to the unknown) and Short-Term Orientation (focus on immediate outcomes) were all positively associated with higher fidelity scores in RCs. This suggests that RCs based in Individualistic cultures demonstrate greater alignment with the RC model. Similarly, RCs in Indulgent cultures outperformed those in Restraint cultures, which prioritise impulse control. Cultures characterised by Uncertainty Acceptance also showed stronger fidelity compared to those with high Uncertainty Avoidance. Finally, RCs in Short-Term-Oriented cultures scored higher than those in Long-Term-Oriented cultures, which emphasise perseverance and future planning.

Reflecting on the global study process, we also identified cross-cultural biases (Kotera *et al*., 2024). One such bias is self-enhancement, or the tendency to express unrealistically positive self-views, which is more common in self-report measures completed by individuals from Individualistic cultures (Dufner *et al*., 2019). Another is ingroup bias - the tendency to evaluate one's own social group more favorably (ingroup favouritism) or unfavorably (ingroup derogation). Ingroup favouritism is typically stronger in Individualistic cultures than in Collectivistic ones (Ma-Kellams *et al*., 2011). Awareness of these biases is essential, particularly when using self-report measures in global studies. As Henrich et al. (2010) pointed out, much of psychological research is based on samples from WEIRD (Western, Educated, Industrialised, Rich, Democratic) societies, which account for only 12% of the global population, yet comprise 96% of research participants. These studies represent WEIRD human psychology, not human psychology universally.

We also investigated implementation practices cross-culturally. For instance, we analysed how RCs are advertised in England and Japan (Kotera *et al*., 2024). Using an adapted discourse analysis framework (Kotera *et al*., 2024), we found that Japanese advertisements emphasised Collectivism (e.g., "learning together") and Long-Term

Orientation (e.g., "life-long learning"), while English texts highlighted Individualism (e.g., "self-management") and Short-Term Orientation (e.g., "skill acquisition").

Importantly, these culturally advantageous traits - such as Individualism, Indulgence and Uncertainty Acceptance - are more common in WEIRD societies (Henrich, 2020). Understanding cultural influences is critical; otherwise, differences in RC fidelity may be mistaken for operational issues, when they are actually rooted in cultural context. These findings call for adapting fidelity assessments to better reflect local cultural values, supporting fairer evaluation and more culturally responsive implementation of RCs.

Culture is essential to our understanding of recovery. A recovery intervention that encourages open self-expression may resonate in one context but feel inappropriate or unsafe in another. This highlights the need for culturally sensitive models of care that adapt recovery principles to align with local values and practices.

3. Forest Bathing: Nature as a Universal Healer

In addition to culturally grounded psychological research, I've also investigated the role of nature-based interventions in mental health (Clarke *et al*., 2021; Kotera & Fido, 2021; Kotera *et al*., 2021; McEwan *et al*., 2021; 2022). One practice that has received growing global attention is forest bathing or shinrin-yoku, which originated in Japan in the 1980s as a public health initiative (Miyazaki, 2018).

Forest bathing involves mindfully spending time in natural environments, particularly forests, with a focus on sensory engagement rather than physical activity. Unlike hiking or jogging (though these are sometimes embedded), forest bathing is about being, not doing - noticing the texture of bark, listening to birdsong, breathing in the forest air. This practice has been shown to reduce stress hormones (cortisol), improve mood, enhance sleep quality and increase feelings of vitality and connectedness (Antonelli *et al*., 2019; Li, 2010; Payne & Delphinus, 2019).

In our meta-analysis of forest bathing studies, we found that its effects on mental health were particularly strong for anxiety reduction, with promising results for depression and burnout as well (Kotera *et al*., 2022). Importantly, these benefits have been observed in both Western and Eastern contexts, suggesting that while the roots of the practice are culturally specific, its appeal and effectiveness are widely adaptable.

While cross-cultural mental health interventions often require careful adaptation (Kotera *et al*., 2023), forest bathing appears to transcend cultural boundaries in a unique way. The practice is inherently inclusive, drawing on a universal human connection to nature. Its simplicity, low cost and accessibility make it a compelling candidate for integration into diverse mental health strategies around the world. Forest bathing does not rely on language, cultural scripts, or complex therapeutic frameworks - instead, it engages the senses and offers space for presence and reflection (Kotera & Sweet, 2019). This universality makes it especially valuable in resource-limited settings or among populations that may be hesitant to engage with conventional mental health services.

As global mental health challenges continue to rise, nature-based interventions like forest bathing may serve as a gentle yet powerful approach to fostering well-being across cultures. By reconnecting individuals with the natural world, forest bathing offers a pathway not only to reduced psychological distress, but also to a sense of belonging, peace and resilience that resonates regardless of geography or background.

4. Implications for Readers in Azerbaijan

The findings shared in this commentary offer important implications for readers in Azerbaijan. As the country continues to strengthen its mental health services and policies (Eyvazova & Asgarov, 2024), the insights from cross-cultural recovery research may support the development of more person-centred, culturally responsive approaches. The CHIME framework, for instance, could provide a valuable structure for understanding and supporting recovery processes among Azerbaijani service users, while allowing for local adaptations that reflect the country's unique cultural and historical values.

Moreover, the cultural patterns identified in our research - such as the influence of individualism, indulgence and uncertainty acceptance on the implementation of RCs - can help inform how new recovery-focused services are introduced in Azerbaijan. While Azerbaijan is often characterised as a Collectivist society, growing exposure to global values may be gradually shifting perspectives, particularly among younger generations (Azizi-Meshkin, 2024). Recognising and balancing these cultural currents could support the design of mental health services that are both innovative and culturally respectful.

Additionally, the practice of forest bathing may hold potential as an accessible and culturally adaptable intervention in Azerbaijan. The country's rich natural landscapes, including its forests, mountains and parks, offer a promising context for the development of nature-based mental health programmes. As our research indicates, forest bathing can improve mental well-being without requiring costly infrastructure or specialised staff, making it a particularly viable option for low-resource settings or rural areas.

Finally, a key message for readers in Azerbaijan is the importance of cultural sensitivity in all aspects of mental health care - from assessment to intervention. Whether adopting the CHIME framework, implementing RCs, or introducing forest bathing, success will depend on how well these approaches align with local beliefs, values and social norms. Through this culturally attuned lens, Azerbaijan has the opportunity to shape mental health services that are not only effective but also deeply rooted in the lived experiences of its people.

5. Closing Reflections

As we continue to globalise mental health research and practice, we must strike a balance between universality and specificity. We must resist the urge to transplant models from one context into another without thoughtful adaptation. That said, some interventions - such as forest bathing - may offer cross-cultural applicability with minimal need for adaptation, owing to their grounding in universal human experiences like nature connectedness. Instead, we should engage in dialogue with local knowledge, co-create solutions with communities and remain open to learning from diverse ways of being and healing.

I look forward to meeting faculty members and students at Azerbaijan University and to discussing these topics together. It will be a valuable opportunity to reflect on shared goals, explore differences and similarities across cultural contexts and consider how cross-cultural research can inform practice on the ground. I hope that the reflections and findings I share will inspire ongoing dialogue and collaboration.

Only by working together - across cultures, disciplines and traditions - can we build a more inclusive, compassionate and effective approach to mental wellbeing.

References

Antonelli, M., Barbieri, G. & Donelli, D. (2019). Effects of forest bathing (shinrin-yoku) on levels of cortisol as a stress biomarker: A systematic review and meta-analysis. *International Journal of Biometeorology*, *63*(8), 1117-1134. https://doi.org/10.1007/s00484-019-01717-x

Azizi-Meshkin, M. (2024). E-government and inclusive development: Bridging the digital divide in Azerbaijan. *Socium*, *1*(1), 84-94. https://doi.org/10.62476/soc1.194

Clarke, F.J., Kotera, Y. & McEwan, K. (2021). A qualitative study comparing mindfulness and shinrin-yoku (forest bathing): Practitioners' perspectives. *Sustainability*, *13*(12), 6761-6761. https://doi.org/10.3390/SU13126761

Dufner, M., Gebauer, J.E., Sedikides, C. & Denissen, J.J. (2019). Self-enhancement and psychological adjustment: A meta-analytic review. *Personality and Social Psychology Review*, *23*(1), 48-72. https://doi.org/10.1177/1088868318756467

Eyvazova, T., Asgarov, R. (2024). Social services provided to women who are victims of domestic violence in Azerbaijan. *Social Issues*, *2*(3), 154-158. https://doi.org/10.30546/SI.2024.3.3.107

Henrich, J. (2020). *The Weirdest People in the World: How the West Became Psychologically Peculiar and Particularly Prosperous*. Penguin Random House.

Henrich, J., Heine, S.J. & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, *33*(2-3), 61-83. https://doi.org/10.1017/s0140525x0999152x

Kitayama, S., Salvador, C.E., Nanakdewa, K., Rossmaier, A., San Martin, A. & Savani, K. (2022). Varieties of interdependence and the emergence of the Modern West: Toward the globalizing of psychology. *American Psychologist*, *77*(9), 991. https://doi.org/10.1037/amp0001073

Kotera, Y., Daryanani, R., Skipper, O., Simpson, J., Takhi, S., McPhilbin, M., ... & Vilar-Lluch, S. (2025). Applying critical discourse analysis to cross-cultural mental health recovery research. *JMIR Formative Research*, *9*(1), e64087, https://doi.org/10.2196/64087.

Kotera, Y., Fido, D. (2022). Effects of shinrin-yoku retreat on mental health: A pilot study in Fukushima, Japan. *International Journal of Mental Health and Addiction*, *20*(5), 2652-2664. https://doi.org/10.1007/S11469-021-00538-7

Kotera, Y., Hara, A., Newby, C., Miyamoto, Y., Ozaki, A., Ali, Y., … & Slade, M. (2025). Development and evaluation of a mental health recovery priority measure for cross-cultural research: Global INSPIRE. Under review.

Kotera, Y., Lyons, M., Vione, K.C. & Norton, B. (2021). Effect of nature walks on depression and anxiety: A systematic review. *Sustainability*, *13*(7), 4015. https://doi.org/10.3390/SU13074015

Kotera, Y., Miyamoto, Y., Vilar-Lluch, S., Aizawa, I., Reilly, O., Miwa, A., ... & Eguchi, S. (2024). Cross-cultural comparison of recovery college implementation between Japan and England: Corpus-based discourse analysis. *International Journal of Mental Health and Addiction*, 1-25. https://doi.org/10.1007/s11469-024-01356-3

Kotera, Y., Richardson, M. & Sheffield, D. (2022). Effects of shinrin-yoku (forest bathing) and nature therapy on mental health: A systematic review and meta-analysis. *International Journal of Mental Health and Addiction*, *20*(1), 337-361. https://doi.org/10.1007/s11469-020-00363-4

Kotera, Y., Ronaldson, A., Hayes, D., Hunter-Brown, H., McPhilbin, M., Dunnett, D., ... & Slade, M. (2024). Cross-cultural insights from two global mental health studies: Self-enhancement and ingroup biases. *International Journal of Mental Health and Addiction*, 1-10. https://doi.org/10.1007/s11469-024-01307-y

Kotera, Y., Ronaldson, A., Hayes, D., Hunter-Brown, H., McPhilbin, M., Dunnett, D., ... & Slade, M. (2024). 28-country global study on associations between cultural characteristics and

recovery college fidelity. *npj Mental Health Research*, *3*(1), 46. https://doi.org/10.1038/s44184-024-00092-9

Kotera, Y., Sweet, M. (2019). Comparative evaluation of neuro-linguistic programming. *British Journal of Guidance & Counselling*, *47*(6), 744-756. https://doi.org/10.1080/03069885.2019.1622075

Kotera, Y., Taylor, E., Brooks-Ucheaga, M. & Edwards, A.M. (2023). Need for a tool to inform cultural adaptation in mental health interventions. *ISSBD Bull*, 1, 2-5. https://issbd.org/wp-content/uploads/2023/06/JBD_47_3S_Combined-pdf.pdf

Leamy, M., Bird, V., Le Boutillier, C., Williams, J. & Slade, M. (2011). Conceptual framework for personal recovery in mental health: Systematic review and narrative synthesis. *The British Journal of Psychiatry*, *199*(6), 445-452. https://doi.org/10.1192/bjp.bp.110.083733

Li, Q. (2010). Effect of forest bathing trips on human immune function. *Environmental health and Preventive Medicine*, 15, 9-17. https://doi.org/10.1007/s12199-008-0068-3

Ma-Kellams, C., Spencer-Rodgers, J. & Peng, K. (2011). I am against us? Unpacking cultural differences in ingroup favoritism via dialecticism. *Personality and Social Psychology Bulletin*, *37*(1), 15-27. https://doi.org/10.1177/0146167210388193

McEwan, K., Giles, D., Clarke, F.J., Kotera, Y., Evans, G., Terebenina, O., ... & Weil, D. (2021). A pragmatic controlled trial of forest bathing compared with compassionate mind training in the UK: Impacts on self-reported wellbeing and heart rate variability. *Sustainability*, *13*(3), 1380. https://doi.org/10.3390/su13031380

McEwan, K., Potter, V., Kotera, Y., Jackson, J.E. & Greaves, S. (2022). This is what the colour green smells like!: Urban forest bathing improved adolescent nature connection and wellbeing. *International Journal of Environmental Research and Public Health*, *19*(23), 15594 https://doi.org/10.3390/ijerph192315594

Miyazaki, Y. (2018). *Shinrin Yoku: The Japanese Art of Forest Bathing*. Timber Press.

Payne, M., Delphinus, E. (2019). The most natural of natural therapies: A review of the health benefits derived from shinrin-yoku (forest bathing). *Advances in Integrative Medicine*, 6, S109-S110. https://doi.org/10.1016/j.aimed.2019.03.316

Kotera, Y., Ronaldson, A., Takhi, S., Felix, S., Namasaba, M., Lawrence, S., ... & Slade, M. Cultural Influences on Fidelity Components in Recovery Colleges: A study across 28 countries and territories. *General Psychiatry*, https://doi.org/10.1136/gpsych-2024-102010

Slade, M. (2009). *Personal Recovery and Mental Illness: A Guide for Mental Health Professionals*. Cambridge University Press.

Slade, M., Longden, E. (2015). Empirical evidence about recovery and mental health. *BMC Psychiatry*, 15, 1-14. https://doi.org/10.1186/s12888-015-0678-4

Sugimoto, Y. (2020). *An Introduction to Japanese Society*, 5th edition. Cambridge University Press. https://doi.org/10.1017/9781108661669

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