



TŪTŪ KĀKĀ

Wellbeing Hononga Index - WeHI

Instruction manual

Finley Ngarangi Johnson

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In preparation:

Journal article detailing the design and development of the WeHI

Journal article outlining the psychometric validation of the WeHI using:

- Mokken Scale Analysis (MSA)
- Confirmatory Factor Analysis (CFA)
- Multi-Group Confirmatory Factor Analysis (MGCFA)
- Multidimensional Item response Theory (MIRT)
- Descriptive Multidimensional Item response Theory Analysis (DMIRT)
- Tests of convergent validity (SWLS & WHO-5)

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Disclaimers & Tikanga

This tool was created **by Māori, with Māori, and for Māori**. It has been designed, developed, and validated to assist in measuring the wellbeing of Māori individuals.

It is important to acknowledge that a) **Māori are diverse peoples**, b) **our wellbeing can and should also be measured on collective levels (whānau, hapori, hapū, iwi)**, and c) **our wellbeing is impacted by a range of external forces and systems outside of our immediate control**.

This resource has been shared '**for the kaupapa**' which reflects the spirit of collective access and use in the name of advancing our aspirations for thriving Māori communities and peoples.

The tool is therefore **not to be commercialized or capitalized on by individuals or organizations**. If you encounter instances of this, please remind the person or organization of this tikanga, and let us know:

Fin@tutukaka.com

If you are interested in adapting the WeHI for use with another cultural group or demographic, please reach out so we can support you to ensure the mana of the tool remains intact.



Whakapapa | Genealogy

The Wellbeing Hononga Index (WeHI) was created by **Finley Ngarangi Johnson** (Rongomaiwahine, Ngāti Kahungunu), a PhD candidate in Psychology (Kaupapa Māori and Indigenous Psychology and Psychometrics) at Te Herenga Waka - Victoria University of Wellington.

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- Professor **Paul Jose**,
- Associate Professor **Priscilla Wehi**,
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Under the guidance of advisory rōpū members:

- Dr. **Mike Ross** (Ngāti Hauā)
- **Stephanie Tibble** (Rongomaiwahine, Rongowhakaata, Ngāti Kahungunu ki Heretaunga, Ngāti Hine)
- **Veronica Thompson** (Ngāti Kahungunu ki Wairoa, ki Wairarapa, Te Iwi Morehu)
- Dr. **Natasha Tassell-Matamua** (Te Ātiawa, Ngāti Makea kei Rarotonga)
- **Kevin Shedlock** (Ngāpuhi, Ngāti Porou, Te Whakatōhea)

Based on the qualitative research foundation of:

- The **Ngaruroro** Model of Māori Wellbeing (Johnson et al., 2024)



Development

All 41 items of the WeHI were developed based on the [Ngaruroro](#) model of Māori wellbeing (Johnson et al., 2024). The Ngaruroro emphasizes that Māori wellbeing is dynamic, holistic, and interconnected.

The model weaves together a combination of 41 perceived capacities, connections, and lifestyle choices related to the following eight themes of Māori wellbeing:

- Here tāngata – Connection to social and familial ties
- Tinana – Lifestyle choices related to the tinana and physical health
- Ngākau – Capacities related to the ‘inner-world’
- Wairua - Lifestyle choices related to spirit and interconnectedness
- Taiao – Connection to the environment
- Taonga Tuku Iho – Connection to cultural treasures
- Matea – Capacities to meet core needs
- Mana – Capacities related to exercising mana



Read the article for a detailed breakdown of the caveats, context, kōrero, and whakapapa



Response scale

The WeHI utilizes a five-point strengths-based Likert-type response scale that aligns with the stages of growth of the Pūhā (Sow thistle) plant.

The sequence ranges from Kākano (the seed; stage of potential) through to Tipu (shoot; intermediate stage), and finally to Puāwai (the blossoming plant; stage of flourishing).

Respondents are encouraged to select the stage of growth that best represents their current feeling of connection, perceived capacity, or lifestyle choices.

The Pūhā scale reflects dynamic Māori philosophies of actualization, becoming, change, and growth. Accordingly, the Kākano stage does not indicate a deficit or failure. It represents untapped potential and the opportunity for growth.





Using & scoring the WeHI

The WeHI can be used in a variety of different contexts

- Measurement: Both the WeHI -roa (long) and WeHI-poto (short) formats can be used to measure the self-reported wellbeing of Māori individuals.
- Clinical contexts: Can be used as an informal data gathering tool to aid in assessment, facilitate psychoeducation, and track client progress.

The WeHI can also be used in self-reflection and wānanga contexts to identify sources of wellbeing, and reflect upon one's relationship with different aspects of the Ngaruroro model of wellbeing.

Kākano (1st)	Tuarua (2 nd)	Tipu (3rd)	Tuawhā (4th)	Puāwai (5th)
1	2	3	4	5

The WeHI is scored by assigning the corresponding numbers to the five response options.

The average is then taken by totaling the responses and dividing that result by the number of items you are using.



Example use

The screenshots below illustrate how the WeHI was designed to be used in an online survey format.

The calming, soft, and generally aesthetically pleasing format provides a greater and more relaxing user experience. This respondent-focused design helps create an atmosphere that is more conducive to engagement and inner-reflection.

The image is presented with each item to ground the respondent in and reaffirm the idea that the process is about identifying strengths and opportunities for growth, not highlight deficits.

Which stage best reflects what you think your current capacities are to meet needs related to pūtea?

*Pūtea refers to money, and to finances.

Kākano (1st)
 2nd
 Tipu (3rd)
 4th
 Puāwai (5th)

12:29

Which stage best reflects what you think your current capacities are to meet needs related to pūtea?

*Pūtea refers to money, and to finances.

Kākano (1st)
 2nd
 Tipu (3rd)
 4th
 Puāwai (5th)

Long form: Items 1-11

Q1. Which stage best reflects your current feeling of connection to the ngahere?

*Here ngahere refers to the bush and forests.
This includes ngahere that you do and don't have whakapapa connections with.

Q2. Which stage best reflects your current feeling of connection to the whenua?

*Here whenua refers to the land in all its shapes forms (including maunga).
This includes whenua that you do and don't have whakapapa connections with.

Q3. Which stage best reflects your current feeling of connection to wai tai?

*Here wai tai refers to bodies of salt water like the moana (ocean).
This includes wai tai that you do and don't have whakapapa connections with.

Q4. Which stage best reflects your current feeling of connection to wai Māori?

*Here wai Māori refers to bodies of fresh water, and includes awa (streams/rivers) and roto (lakes).
This includes the wai Māori that you do and don't have whakapapa connections with.

Q5. Which stage best reflects your current feeling of connection to ngā rangi?

*Here ngā rangi refers to the various bodies that reside in the sky (includes the moon and the stars).

Q6. Which stage best reflects your current feeling of connection to your whānau?

*Here whānau refers to the family who we are related to by blood, those who raised us (whāngai), and also includes those who we have chosen.

Q7. Which stage best reflects your current feeling of connection to your hapū?

*Here hapū refers to your sub-tribe(s).

Q8. Which stage best reflects your current feeling of connection to your iwi?

*Here iwi refers to your tribe(s).

Q9. Which stage best reflects your current feeling of connection to your hapori?

*Here hapori refers to the communities that you are a part of and includes those that are Māori, non-Māori, local, online, sports related, and religious.

Q10. Which stage best reflects your current feeling of connection to your hoa?

*Here hoa refers to your friends.

Q11. Which stage best reflects your current feeling of connection to your tīpuna?

*Here tīpuna refers to your ancestors.

Long form: Items 12-22

Q12. Which stage best reflects your current feeling of connection to your Reo Māori?

*Here Reo Māori refers to the Māori Language.

Q13. Which stage best reflects your current feeling of connection to your mātauranga Māori?

*Here mātauranga Māori refers to both the contemporary and traditional Māori knowledge, and includes means of transmission, and storage.

Q14. Which stage best reflects your current feeling of connection to your uaratanga Māori?

*Here uaratanga Māori refers to Māori values and includes the likes of manaakitanga (hospitality, generosity, respect), whanaungatanga (relationships), and kotahitanga (unity).

Q15. Which stage best reflects your current feeling of connection to your tikanga Māori?

Here tikanga Māori refers to the customary protocols, and practices that drive Māori ways of being.

Q16. Which stage best reflects your current feeling of connection to your tūrangawaewae?

*Here tūrangawaewae refers to traditional places of belonging like marae and urupā as well as contemporary places like suburbs and family homes.

Q17. Which stage best reflects what you think your current capacities are to manaaki others?

*Here manaaki refers to uplifting, caring for, and being hospitable.

Q18. Which stage best reflects what you think your current capacities are to tū tangata?

*Here tū tangata refers to standing in the fullness of who you are. Specifically, it relates to expressing who you are and includes all forms of identity including ethnic, cultural, gender, and sexual.

Q19. Which stage best reflects what you think your current capacities are to whiriwhiri?

*Here whiriwhiri refers to choosing or deciding, and relates to the control you think you have over how your life unfolds.

Q20. Which stage best reflects what you think your current capacities are to whakatere?

*Here whakatere refers navigating the challenges that come up in life.

Q21. Which stage best reflects what you think your current capacities are to tū toa?

*Here tū toa refers to standing confident, accomplished, or capable, in a skill, or area of expertise. This can include things that you do for work or hobbies.

Q22. Which stage best reflects what you think your current capacities are to meet needs related to whai mōhiotanga?

*Here whai mōhiotanga refers to gaining knowledge, and includes all types of learning.

Long form: Items 22-32

Q23. Which stage best reflects what you think your current capacities are to meet needs related to tuku mōhiotanga?

*Here tuku mōhiotanga refers to the passing on of knowledge, and relates to all types of teaching.

Q24. Which stage best reflects what you think your current capacities are to meet needs related to pūtea?

*Here pūtea refers to money, and relates to finances.

Q25. Which stage best reflects what you think your current capacities are to meet needs related to kāinga?

*Here kāinga refers to your housing.

Q26. Which stage best reflects what you think your current capacities are to meet needs related to wā whakatā?

*Here wā whakatā refers to relaxing and having a break from the busyness of life.

Q27. Which stage best reflects your current capacity to manage your kare ā-roto?

*Here kare ā-roto refer to your emotions.

Q28. Which stage best reflects your current capacity to manage your whakaaro?

*Here whakaaro refers to your thoughts.

Q29. Which stage best reflects your current capacity to manage your waiaro?

*Here waiaro refer to your attitudes and outlook.

Q30. Which stage best reflects your current capacity to express aroha?

*Here aroha refers to love, and extends to all forms of love.

Q31. Which stage best reflects your current capacity to heal from pāmamae

*Here pāmamae refers to trauma, grief, and deep pain.

Q32. Which stage best reflects your current lifestyle choices related to kai?

*Here kai refers the things you consume that make up your diet.

Long form: Items 33-41

Q33. Which stage best reflects your current lifestyle choices related to kori tinana?

*Here kori tinana refers to moving your body, and includes all forms of exercise and physical activity.

Q34. Which stage best reflects your current lifestyle choices related to moe?

*Here moe refers to sleep.

Q35. Which stage best reflects your current lifestyle choices related to kanohi kitea?

*Here kanohi kitea refers to being physically present and having your face seen by others.

Q36. Which stage best reflects your current lifestyle choices related to kai whakapiri?

*Here kai whakapiri refers to substances like alcohol, marijuana, and methamphetamine, that some people use to self-medicate and feel a sense of connection.

Q37. Which stage best reflects your current lifestyle choices related to being in wāhi wairua?

Here wāhi wairua refers to spaces and places where wairua as you understand it is nurtured.

Q38. Which stage best reflects your current lifestyle choices related to connecting with atua?

*Here atua can refer to ancestors of influence, personifications of environmental domains, deities, or god(s).

Q39. Which stage best reflects your current lifestyle choices related to experiencing wana?

*Here wana (exhilaration) encapsulates feelings of wehi (awe/admiration/shock) in response to displays of ihi (charisma/authority/life force). You might notice the wana when getting goosebumps hearing a karanga, holding a new-born baby, watching kapa haka, seeing the night sky full of stars, or having a thrilling experience.

Q40. Which stage best reflects your current lifestyle choices related to mahi aroha?

*Here mahi aroha refers to the initiatives, hobbies, projects, or work that you are involved in that is motivated by passion, love, and service rather than financial incentives.

Q41. Which stage best reflects your current lifestyle choices related to poipoi i te mauri?

*Here poipoi i te mauri refers to nurturing the life force of the beings, spaces, and things around you. This can be practiced through maintaining careful and peaceful interactions, and reciting karakia.

Short form: Items 1-19

Q1. Which stage best reflects your current feeling of connection to the ngahere?

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Q2. Which stage best reflects your current feeling of connection to the whenua?

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Short form: Items 21-40

Q19. Which stage best reflects what you think your current capacities are to whiriwhiri?

*Here whiriwhiri refers to choosing or deciding, and relates to the control you think you have over how your life unfolds.

Q21. Which stage best reflects what you think your current capacities are to tū toa?

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Q40. Which stage best reflects your current lifestyle choices related to mahi aroha?

*Here mahi aroha refers to the initiatives, hobbies, projects, or work that you are involved in that is motivated by passion, love, and or service rather than financial incentives.



Factor structures

Long-form

WeHI_LF <- '

MW=~ Taiao + Here + Taonga + Mana + Matea + Ngākau + Tinana + Wairua

Taiao =~ Q1 + Q2 + Q3 + Q4 + Q5

Here =~ Q6 + Q7 + Q8 + Q9 + Q10 + Q11

Taonga =~ Q12 + Q13 + Q14 + Q15 + Q16

Mana =~ Q17 + Q18 + Q19 + Q20 + Q21

Matea =~ Q22 + Q23 + Q24 + Q25 + Q26

Ngākau =~ Q27 + Q28 + Q29 + Q30 + Q31

Tinana =~ Q32 + Q33 + Q34 + Q35 + Q36

Wairua =~ Q37 + Q38 + Q39 + Q40 + Q41'

N	X ²	X ² df	X ² p-value	CFI	RMSEA (90%CI)	SRMR
943	3782.100	771	<.001	.950	.064 (.062 - .066)	.072

*Calculated using the Diagonally Weighted Least Squares (DWLS) estimator

Short-form

WeHI_SF <- '

MW=~ Taiao + Here + Taonga + Mana + Matea + Ngākau + Wairua

Taiao =~ Q1 + Q2 + Q4

Here =~ Q7 + Q8 + Q11

Taonga =~ Q13 + Q15 + Q16

Mana =~ Q18 + Q19 + Q21

Matea =~ Q22 + Q23 + Q35

Ngākau =~ Q27 + Q28 + Q29

Wairua =~ Q37 + Q38 + Q40'

N	X ²	X ² df	X ² p-value	CFI	RMSEA (90%CI)	SRMR
943	1122.058	182	<.001	.960	.074 (.070 - .078)	.075

*Calculated using the Diagonally Weighted Least Squares (DWLS) estimator



References

Johnson, F. N., Wehi, P., Neha, T., Ross, M., Thompson, V., Tibble, S., Tassell-Matamua, N., Shedlock, K., Fox, R., Penman, Z., Ritchie, T., Winter, T., Arahanga-Doyle, H., & Jose, P. E. (2024). Introducing “Ngaruroro”, a New Model for Understanding Māori Wellbeing. *International Journal of Environmental Research and Public Health*, 21(4), 445-. <https://doi.org/10.3390/ijerph21040445>

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