



Hōmai te Waiora ki Ahau

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Method:

A twelve-item, self-report measure administered as a series of pictures during face-to-face interview, each item is conceptualized as a source of waiora, respondents are asked to rate the waiora obtained from each dimension on a 13 point Likert rating scale.

Intended Applications:

- A tool for the measurement of waiora among Māori
- Represents a Māori construct of psychological wellbeing
- Able to be administered when respondents have little, or no, understanding of the Māori language
- Provides an opportunity for Māori to consider the manner in which their lives may be influenced by the waiora obtained from each dimension
- Provides an aggregate, unidimensional, score which may help consumers, caregivers and service providers to evaluate interventions that aim to promote the psychological wellbeing of Māori
- Provides multidimensional information, or a profile of scores, which may help to identify domains of wellness and/or possible pathways for personal development
- Among consumers, caregivers and providers of Māori health services, it is hoped the establishment of this measure will assist the current transformation of consciousness towards use and acceptance of psychosocial constructs which have relevance for Māori

Pilot Study Outcomes:

Based on anterior interviews with n=21 self-identified Māori women, aged 19-34 years, during the last trimester of pregnancy.

Evidence of irregular score distribution:

- Three of the twelve item means did not fall within the middle zone of the rating scale, the difference between item mean and median was >1 for six items, six items displayed significant skewness or kurtosis, five items yielded low standard deviations (< .3)
- Response variability was low for some items, the full range of score alternatives were not always utilized
- respondents tended to score towards the upper end of the scale and responses were sometimes clustered too closely together

Evidence of Reliability:

- The data obtained from administration of this measure was normally distributed: the overall mean (\bar{x} = 95.54) fell within one standard deviation of the mid-score for the total measure (48-96); the distribution of total measure scores did not show significant skewness or kurtosis and there was no disparity between the mean and median. The robustness of this measure could be improved as scores tended to fall towards the upper end of the rating scale; the standard deviation was relatively small (σ = 18.88) and respondents did not utilize the full range of rating options available
- The measure was sensitive to individual differences and respondents did not produce similar scores: the one way ANOVA ($F_{(1,20)} = 9.4555$, $p < .001$) and Hotelling's T Squared ($T_{(1,20)} = 4.3095$, $p < .001$) were both significant.
- The scale was largely composed of internally consistent items: none of the items had an $\alpha > .7$ but six items failed to reach significance. Chronbach's α -coefficient α for the scale was .5486 and this would only have improved slightly with the removal of items.
- Such findings suggest a borderline level of internal consistency which may improve with development of the measure's robustness and sensitivity.

Evidence of Validity:

- Content validity** - concepts used in the development of this measure were derived from the literature, expert opinion and peer group discussions.
- Face validity** - the measure was able to be administered, respondents understood the questions and were willing to participate in the interview.
- Convergent validity** - a significant correlation coefficient was found between aggregate waiora scores and self-rated feelings of overall waiora ($r = .46$, $p < 0.01$). This relationship also provides evidence of criterion-related validity, that is, the aggregate score was a predictor of self-rated waiora.
- Discriminant validity** / Freedom from confounding factors



Strategies to improve construct validity and internal consistency:

- Develop a methodology to improve response variability, normality of data, robustness, dispersal of scores, highlight irregular items and identify items which may need further be amended or included
- Focus group discussions with Māori, in a range of contexts, to gain consensus on the manner in which items are described and presented
- Identify and address other threats to construct validity - ask a panel of mental health experts to critique the operationalizations, develop anatomical network and semantic net
- Develop methodologies to explore and address the instrument's discriminatory power (ability to discriminate between groups), responsiveness (ability to detect change over time), acceptability (is it user-friendly) and practicality (is it easy to administer, cost-efficient, is the data accessible, is training required)

Artists:

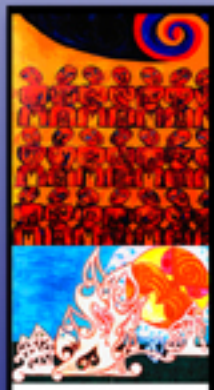
A series of Māori health promotion pictures produced by Rocky Kahurangi (Ngāti Porou) for the Ministry of Health were used in the development of this measure. In addition, Turnike Clarke (Ngāti Korokī, Ngāti Tūpā, Ngāti Hauā) and Elizabeth (Beth) Anderson (Ngāti Hauā ki Whanganui, Tūwharetoa, Ngāti Maru ki Taranaki) produced a series of pictures specifically for this purpose.



Whenua



Te Ora



Whanaungatanga



Te Ora



Te Ora



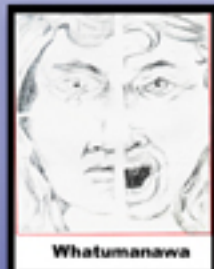
Te Ora



Te Ora



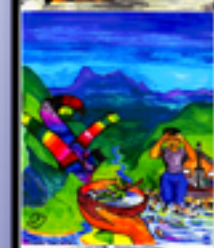
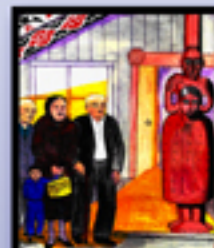
Te Ora



Te Ora



Te Ora



Tikanga Māori
Tikanga Pākehā

no evidence of a linear relationship was found between waiora scores and the scores obtained from administration of a non Māori measure of psychological wellbeing, Affectometer 2. In addition, no evidence of linear relationships were found between the aggregate waiora scores and whether respondents considered tikanga to be important, there being able to identify their tel, identified with an active stage of Māori identity development and/or thought of themselves as Māori (rather than part Māori, part Pākehā or mostly Pākehā).