Hōmai te Waiora ki Ahau
Dr Stephanie Palmer, Te Pūmanawhau Haurua, School of Māori Studies, Massey University, Wellington, New Zealand

Method:
A brief item, self-report measure administered as a series of pictures during face-to-face interview. Each item was visualized as a source of wairau, respondents are asked to rate the wairau with a score from each dimension on a 13-point Likert rating scale.

Intended Applications:
- A tool for the measurement of well-being among Māori
- A scale for health professionals to identify the manner in which their clients may be influenced by the wairau
- Provides an aggregate, unidimensional score which may help consumers, caregivers, and service providers to evaluate interventions that aim to promote the psychological well-being of Māori
- Provides information about the score, which may help to identify domains of well-being and/or possible pathways for personal development

Evidence of irregular score distribution:
- Three of the 13 score items did not fall within the middle zone of the rating scale: the difference between item mean and median was ±6.6 for six items, six items displayed significant skewness or kurtosis, five items yielded low standard deviations (≤0.5)
- 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 median (z = 0.954) fell within one standard deviation of the mid-score for the total measure (46-95); the distribution of total scores did not show significant skewness or kurtosis and there was no disparity between the median and mean.
- The robustness of this measure could be improved on as scores tended to fall towards the upper end of the rating scale, the standard deviation was relatively small (n=18.8), and respondents did not utilise the full range of rating options available.
- The scale was sensitive to individual differences and respondents differed in scores, the scale was ANOVA (F=3.87, p<0.01) and Hotelling’s T² (P=0.05, p<0.02) were both significant.

Evidence of Validity:
- Content validity: all concepts used in the development of this measure were derived from the literature, expert opinion and focus groups.
- Face validity: the scale was administered, respondents felt the questions and were willing to participate.
- Convergent validity: a significant correlation coefficient was found between aggregate wairau scores and self-rated feelings of overall wairau (r=0.4, p=0.01). This relationship also provides evidence of criterion-related validity, that is, the aggregate score was a predictor of self-rated wairau.

Strategies to improve construct validity and internal consistency:
- Develop a methodology to improve response variability, normality of data, reliability. Design of scores, highlights irregular items and identify items which may need further refinement or deletion.
- 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 conceptualizations, develop an instrument and present the draft.

Plast Study Outcomes:
Based on interviews with n=31 self-identified Māori women, aged 15-44 years during the last trimester of pregnancy.

Evidence of Validity:
- Content validity: all concepts used in the development of this measure were derived from the literature, expert opinion and focus groups.
- Face validity: the scale was administered, respondents felt the questions and were willing to participate.
- Convergent validity: a significant correlation coefficient was found between aggregate wairau scores and self-rated feelings of overall wairau (r=0.4, p=0.01). This relationship also provides evidence of criterion-related validity, that is, the aggregate score was a predictor of self-rated wairau.

Discriminant validity: Freedom from confounding factors - no evidence of a linear relationship was found between wairau scores and the scores obtained from administration of a non-Māori measure of well-being, Māotūkura. In addition, no evidence of linear relationships were found between the aggregate wairau scores and whether respondents considered Māotūkura to be important, there being able to identify their key, identified with an active stage of Māori identity development and thought of themselves as Māori (rather than part-Māori, part-Pacific or mostly Pacific).

Artists:
A series of Māori health promotion pictures produced by Róbin Kahulsea (Ngāti Porou) for the Ministry of Health were used in the development of this measure. In addition, Tumere Clarke (Ngāti Korou), Ngāti Tia, Ngāti Haua and Elizabeth (Rei) Anderson (Ngāti Haua ki Whangāuru, Tangihawea, Ngāti Maru ki Te Whanganui) produced a series of pictures specifically for this purpose.

Kamo: Whenua
Te Taha Hinengaro
Whanaungata
Te Taha Tinana
Wairuatanga
Mana
Te Ao Tawhito
Te Ao Hou
Whatumanawa
Mauri
Tikanga Māori
Tikanga Pākehā