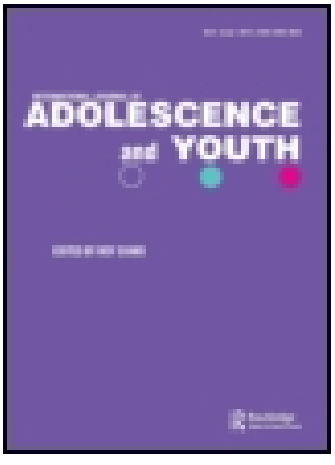

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Pilot of Te Tomo mai, a child and adolescent mental health service evaluation tool for an indigenous rangatahi (youth) population

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Pilot of Te Tomo mai, a child and adolescent mental health service evaluation tool for an indigenous *rangatahi* (youth) population

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The acceptability of Child and Adolescent Mental Health Services (CAMHS) to indigenous *rangatahi* (12–19-year-olds) requires investigation. Evaluation tools able to take account of the more holistic approach to the attainment of mental health that characterises Māori, the indigenous population of Aotearoa (New Zealand) with specificity to the *rangatahi* population are critical to this examination. The study aims were to: (1) develop an instrument and establish its psychometric properties; and (2) use the measure to establish *rangatahi* views on desirable CAMHS characteristics. A *kaupapa Māori* (*Māori*-driven) research paradigm, based on the traditional *Pōwhiri* process of engagement and participation, particularly the components of *karanga*, *mihimihi*, *whaikōrero* and *koha* guided this quantitative research approach. These components are essential to positive contact and commitment to the study processes by researchers and participants. A self-administered survey, Te Tomo mai, was developed by modifying a North American questionnaire, the Youth Services Survey for Youth. The intent of the tool was to record *rangatahi* experiences and views on service acceptability. The Te Tomo mai survey incorporates questions designed to examine CAMHS delivery in the light of the *Whare Tapa Whā*, a Māori comprehensive model of health with a focus on culturally responsive services. This survey was completed by a cohort of 69 Māori *rangatahi* who were referred to six CAMHS District Health Boards in Aotearoa. The Te Tomo mai instrument factor structure, specifically the cultural factor, had similarity to the North American questionnaire from which it had been derived. This work confirms the concept that Māori desire therapeutic methods consistent with the *Whare Tapa Whā*, such as the importance of culture and spirituality. It further identified issues relevant to Māori *rangatahi* acceptability with CAMHS such as access, satisfaction and appropriateness. The participants were generally positive about the services they received from the CAMHS, which shows good acceptability of CAMHS for Māori. The Te Tomo mai instrument can prove useful if applied in Aotearoa or other similar cultural settings. It is a means of determining the cultural acceptability which will contribute to improving CAMHS delivery to *rangatahi* from indigenous populations.

Keywords: indigenous; child and adolescent mental health; service measurement and improvement

Introduction

Access to effective mental health services for *Māori*, the indigenous population in Aotearoa, inclusive of the *rangatahi* (12–19-year-olds) population, is a priority given their high mental health need (Baxter, Kingi, Tapsell, Durie, & McGee, 2006; Ramage et al., 2005). It is therefore important to assess whether these services are addressing the issues crucial to *rangatahi* who access these services.

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Measuring acceptability with mental health services by identifying service users' concerns and issues is essential in assessing effectiveness (Merry et al., 2004). There has been some progress in Aotearoa with respect to the development of a Child and Adolescent Mental Health Services (CAMHS) evaluation tool, which is available for caregivers to complete (McClintock, Moeke-Maxwell, Frampton, & Mellsop, 2012). The establishment of a similar, reliable and valid tool to examine acceptability with CAMHS for use by *Māori rangatahi* would complement this development and also provide further opportunity to support CAMHS delivery to *rangatahi* from an indigenous and/or colonised population. The development of a culturally attuned tool would play a significant role in service improvement (McClintock, Tauroa, & Mellsop, 2012; World Health Organisation, 2005).

Method

Study protocols

A kaupapa Māori philosophy consistent with Māori aspirations and development guided the methodology (McClintock, Mellsop, Merry, & Moeke-Maxwell, 2010). This process is founded on mutual respect and reciprocity where the researcher is dependent on the participant to consent to all components of the research process. Māori control over involvement in research of Māori issues is also integral to a kaupapa Māori research approach. Māori health research outcomes must benefit Māori by providing solutions that address Māori health issues (Durie, 2003; Smith, 1999).

Aims

The first aim of the study was to develop a measure that focused on the perceptions of *rangatahi* regarding the culturally responsiveness of CAMHS delivery to *Māori*. The result is the Te Tomo mai survey instrument (see Appendix).

The second aim was to pilot this survey to sample the perceptions of *rangatahi* who accessed the support of the six participating CAMHS District Health Boards (DHBs; the 20 DHBs in Aotearoa receive health funding directly from the Ministry of Health and are required to provide CAMHS to their regions. Te Roopu Kimiora (Northland DHB), Whirinaki (Counties Manukau DHB), Te Oranga Hinengaro (MidCentral DHB), Te Whare Marie (Capital and Coast DHB), Te Korowai Atawhai (Canterbury DHB) and Te Oranga Tonu Tanga (Southern DHB) are the CAMHS that participated in this study from six DHBs). The following was the study hypothesis:

Hypothesis. Māori desire therapeutic methods consistent with the Whare Tapa Whā,[1] such as recognising the importance of culture and spirituality.

Development of Te Tomo mai

The Youth Services Survey for Youth (YSS_Y) is an instrument utilised in North America to gauge youth acceptability of CAMHS (California Department of Mental Health Systems of Care, 2005). Slight modifications were made in constructing the Te Tomo mai measurement (Appendix) based on the author's views and two items, Q3: *I felt I had a say in the assessment process* and Q17: *I understood that medication would help*, were added. These additions addressed the issue of treatment participation in CAMHS. A Likert scale was used for all questions scored from 1 – strongly disagree to 5 – strongly agree as per the YSS_Y.

Recruitment of participants

Te Tomo mai, a self-administered survey (Appendix), was distributed to a purposive sample of Māori *rangatahi* (12–19-year-olds), aligned with the ethical approval (MEC/10/05/042), who had accessed the participating CAMHS from June 2009 to June 2010.

Furthermore, the recruitment process aligned with the *Pōwhiri* process of engagement and participation, which included the *karanga* or invitation and the consent to complete the survey; *mihimihi* or information sheet explaining the study; *whaikōrero* or commitment to complete the survey; and *koha* return of the survey (McClintock et al., 2010).

Aim one: Tomo mai survey validity

The validity of the survey instrument was assessed by relating the survey results to those from an existing, validated tool (Myers & Winter, 2002). Establishing the construct validity of the Te Tomo mai tool relied on an exploratory factor analysis of the survey questions utilising a varimax rotation, undertaken using SPSS version 20. Results from the Te Tomo mai instrument based on a Māori *rangatahi* sample were compared to the factor structure identified using the YSS_Y with a North American sample (California Department of Mental Health Systems of Care, 2005).

Aim two: Tomo mai survey results: experiences and acceptability

Hypothesis

The associations between the key satisfaction question (#1 in Appendix), *Overall I am satisfied with the services I received*, and the items in the survey relating to cultural relevancy were tested using the non-parametric Spearman's rank correlation coefficient (r_s). No correction for multiple testing was applied and a two-tailed p-value < 0.05 was taken to indicate statistical significance (Armitage, Berry, & Mathews, 2002). This approach is justified because of the study's exploratory nature and the fact that it focuses on identifying a consistent pattern of associations among correlations.

Results

This section records the results obtained following the survey distribution identified in the 'Method' section. Table 1 displays the numbers of *rangatahi* from the six CAMHS who participated in the *Te Tomo mai* quantitative phase.

Aim one: validity and reliability

As a result of receiving responses that included a high number of 6s (Not applicable), two items, Q2: *I helped to choose my services* (60/69) and Q17: *I understood that medication would help* (53/69), were excluded from the factor analysis. This established the construct validity producing four factors with eigen values greater than 1, collectively explaining 89% of the variance and the associated factor loadings (Tables 2 and 3). The four factors are:

Table 1. Participant numbers.

Child and Adolescent Mental Health Services	Te Roopu Kimiora	Whirinaki	Oranga Hinengaro	Te Whare Marie	Te Korowai Atawhai	Te Oranga Tonutanga	Total
Numbers of participant	9	21	12	11	10	6	69

Table 2. The YSS_Y and the Te Tomo mai factor items.

		YSS_Y	Te Tomo mai
1.	Overall, I am satisfied with the services I received	Appropriate	Satisfaction
2.	I helped to choose my services	–	
3.	I felt I had a say in the assessment process	Participation	Satisfaction
4.	I helped to choose my treatment goals	Participation	Appropriate
5.	The people helping me stuck with me no matter what	Appropriate	Satisfaction
6.	I felt I had someone to talk to when I was troubled	Appropriate	Satisfaction
7.	I participated in my own treatment	Participation	Appropriate
8.	I received services that were right for me	Appropriate	Appropriate
9.	The location of services was convenient	Access	Access
10.	Services were available at times that were convenient for me	Access	Appropriate
11.	I got the help I wanted	Appropriate	Satisfaction
12.	I got as much help as I needed	Appropriate	Satisfaction
13.	Staff treated me with respect	Cultural	Cultural
14.	Staff respected my family's spiritual beliefs	Spiritual	Spiritual
15.	Staff spoke with me in a way that I understood	Cultural	Cultural
16.	Staff were sensitive to my cultural background	Cultural	Cultural
17.	I understood that medication would help	–	

- Cultural sensitivity included four items (Questions 13, 14, 15 and 16) and explained 28.5% of the variation.
- Satisfaction with services included six items (Questions 1, 3, 5, 6, 11 and 12) and explained 26.1% of the variation.

Table 3. Te Tomo mai factor loadings.

		Cultural	Satisfaction	Appropriate	Access
1.	Overall, I am satisfied with the services I received	0.23	*0.80*	0.36	0.14
2.	I helped to choose my services				
3.	I felt I had a say in the assessment process	0.51	*0.63*	0.36	0.26
4.	I helped to choose my treatment goals	0.32	0.43	*0.75*	0.21
5.	The people helping me stuck with me no matter what	0.45	*0.67*	0.40	0.22
6.	I felt I had someone to talk to when I was troubled	0.29	*0.56*	0.55	0.23
7.	I participated in my own treatment	0.31	0.41	*0.74*	0.23
8.	I received services that were right for me	0.32	0.56	*0.59*	0.27
9.	The location of services was convenient	0.30	0.25	0.28	*0.86*
10.	Services were available at times that were convenient for me	0.39	0.32	*0.79*	0.17
11.	I got the help I wanted	0.42	*0.61*	0.60	0.09
12.	I got as much help as I needed	0.43	*0.71*	0.42	0.19
13.	Staff treated me with respect	*0.84*	0.31	0.35	0.11
14.	Staff respected my family's spiritual beliefs	*0.84*	0.23	0.36	0.12
15.	Staff spoke with me in a way that I understood	*0.79*	0.39	0.20	0.21
16.	Staff were sensitive to my cultural background	*0.83*	0.23	0.24	0.26
17.	I understood that medication would help				

Notes: Questions 2 and 17 were excluded as a consequence of having too many 'not applicable' entries. The values in italics indicate which factor the items are associated with eg. item 1 *0.80* satisfaction.

- Access (convenience) included a single item (Questions 9) and explained 8.9% of the variation.
- Appropriate included four items (Questions 4, 7, 8 and 10) and explained 25.5% of the variation.

The results of Te Tomo mai factor analysis had higher variance and therefore more favourable than the YSS_Y (Table 4).

Aim two: experiences and acceptability

Hypothesis

This analysis using Spearman's correlation coefficients identified the associations between the key question (#1 in Appendix and Table 5), *Overall I am satisfied with the services I received*, and the items relating to culture – Q13: *Staff treated me with respect*, Q15: *Staff spoke with me in a way that I understood*, Q16: *Staff were sensitive to my cultural background* and spirituality, and Q14: *Staff respected my family's spiritual beliefs*.

Table 4. Cronbach's α for factors in the YSS_Y Survey and Te Tomo mai.

	YSS_Y ($n = 430$)[a]	Te Tomo mai ($n = 69$)
Cultural sensitivity	0.86	0.95
Satisfaction	–	0.95
Access	0.71	0.90
Appropriate	0.92	0.95
Participation	0.77	–

[a] Of the participants in the YSS_Y Survey, 29% identified other than white/Caucasian.

Table 5. Item Q1 is positively correlated with all the other items.

		N	Correlation coefficient	Two-tailed *p*-value
2.	I helped to choose my services	60	0.37	0.003
3.	I felt I had a say in the assessment process	65	0.65	<0.001
4.	I helped to choose my treatment goals	64	0.63	<0.001
5.	The people helping me stuck with me no matter what	64	0.76	<0.001
6.	I felt I had someone to talk to when I was troubled	66	0.69	<0.001
7.	I participated in my own treatment	64	0.65	<0.001
8.	I received services that were right for me	67	0.77	<0.001
9.	The location of services was convenient	65	0.44	<0.001
10.	Services were available at times that were convenient for me	66	0.58	<0.001
11.	I got the help I wanted	65	0.67	<0.001
12.	I got as much help as I needed	66	0.87	<0.001
13.	Staff treated me with respect	67	0.59	<0.001
14.	Staff respected my family's spiritual beliefs	63	0.56	<0.001
15.	Staff spoke with me in a way that I understood	65	0.53	<0.001
16.	Staff were sensitive to my cultural background	62	0.56	<0.001
17.	I understood that medication would help	63	0.43	<0.001

Note: All 6s = 'Not applicable' were dropped for this analysis. The sample sizes reduced to 60 and 53 representing a significant amount of 'Not applicable' data that was removed.

Discussion

The first aim of the study was to develop and test a measure that focused on the *rangatahi* perceptions of the acceptability of CAMHS delivery to Māori. The result was the development of the Te Tomo mai survey with demonstrated construct validity and reliability with the identification of four factors – cultural sensitivity, satisfaction, appropriateness and access.

The second aim was to use this survey to sample the perceptions of Māori *rangatahi* who accessed the support of the six CAMHS. The results suggest a general satisfaction from the respondents with the CAMHS delivery from the six CAMHS. The data collected from the participants revealed factors that contributed to responsive CAMHS for Māori. Acceptability of CAMHS was confirmed to be related to service delivery that takes into account support for issues of cultural and spirituality at statistically significant levels. This study sample supports the concept that Māori desire therapeutic methods consistent with the Whare tapa whā, such as the importance of recognising culture and spirituality. If these components are delivered, this leads to acceptability with CAMHS. Similar results are reported in the qualitative phase of this project that followed the survey testing (McClintock, Tauroa, & Mellsop, in press).

Conclusion

Accessing culturally responsive CAMHS is a priority for all but particularly for indigenous, colonised populations such as Māori and from a *rangatahi* perspective. This is the first study in Aotearoa to attempt an investigation that supports this important issue. It has been valuable to assess the acceptability of these services with a culturally attuned tool for use with Māori *rangatahi* to assess details of their acceptability with CAMHS.

The results of the study can contribute to continuous service improvement and quality CAMHS provision. The tool can play a significant role in developing and refining culturally responsive CAMHS and with future modifications may be appropriate for other indigenous cultures.

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Notes on contributors

Kahu McClintock (Tainui, Ngati Mutunga, Ngati Porou) is a health researcher with vast experience in Child and Adolescent Mental Health Service (CAMHS) delivery and research, Special Education and Kaupapa Maori Education. She has led the development, validation and implementation of a number of Mental Health evaluation and outcome tools for Māori, the Indigenous population of Aotearoa (New Zealand) She is currently a research fellow at Te Rau Matatini (Māori Health Workforce Organisation).

Roimata Tauroa (Ngaati Korokii, Ngaapuhi, Ngaati Maniapoto, Ngaati Tuwharetoa, Ngaati Kea, Ngaati Tuara) research interests are around kaupapa Maaori (Māori philosophy research such as Hauora (Health), Maatauranga (Education), Ngaa Koorero o Neeheraa (Traditional Māori knowledge). She is currently a researcher at Te Rau Matatini (Māori Health Workforce Organisation).

Graham Mellsop is an experienced mental Health researcher with more than 170 refereed publications in many areas including medical education, epidemiology, outcomes, pharmacology, classification and forensic psychiatry. He has worked with a number of Maori co-workers on projects related to the delivery of mental health services to New Zealand's indigenous. Currently he is Professor of Psychiatry at the Waikato Clinical School of the University of Auckland.

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Note

1. The Whare Tapa Whā framework relies on a Māori world view of health, a holistic approach advocating a balance between the four dimensions of the Taha Whānau (family), the Taha Tinana (physical), the Taha Hinengaro (cognitive/intellectual) and the Taha Wairua (spiritual; Durie, 1994). It is believed that if one aspect is in distress then this anguish impacts upon the others causing tension and increased risk of poor health. Optimal health requires a balance between all four dimensions.

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Appendix. Tomo mai responsive child and adolescent mental health services (CAMHS) for Māori *rangatahi*

This survey contains a list of statements asking for your view of the CAMHS that you went to. Beside each statement, there is a scale that ranges from *1* (*strongly disagree*) to *5* (*strongly agree*) or *6* (*not applicable*). For each item, please *circle* the number that represents the extent to which you agree with the statement. Please answer *every item* and make only *one* choice per item. Please respond as honestly as you can remember.

Name of the service	Strongly disagree	Disagree	Uncertain	Agree	Strongly agree	Not applicable
1. Overall, I am satisfied with the services I received	1	2	3	4	5	6
2. I helped to choose my services	1	2	3	4	5	6
3. I felt I had a say in the assessment process	1	2	3	4	5	6
4. I helped to choose my treatment goals	1	2	3	4	5	6
5. The people helping me stuck with me no matter what	1	2	3	4	5	6
6. I felt I had someone to talk to when I was troubled	1	2	3	4	5	6
7. I participated in my own treatment	1	2	3	4	5	6
8. I received services that were right for me	1	2	3	4	5	6
9. The location of services was convenient	1	2	3	4	5	6
10. Services were available at times that were convenient for me	1	2	3	4	5	6
11. I got the help I wanted	1	2	3	4	5	6
12. I got as much help as I needed	1	2	3	4	5	6
13. Staff treated me with respect	1	2	3	4	5	6
14. Staff respected my family's spiritual beliefs	1	2	3	4	5	6
15. Staff spoke with me in a way that I understood	1	2	3	4	5	6
16. Staff were sensitive to my cultural background	1	2	3	4	5	6
17. I understood that medication would help	1	2	3	4	5	6